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MEDICAL AND SURGICAL

JOURNAL:

EXHIBITING

A CONCISE VIEW

OF THE

LATEST AND MOST IMPORTANT DISCOVERIES

IN

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THE

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MEDICAL AND SURGICAL JOURNAL.

1. JANUARY, 1811.

PART I.

ORIGINAL COMMUNICATIONS.

I.

Observations on two Distinct Varieties of Ophthalmia, prevalent in the Army. By HENRY WALKER, M. D. Assistant-Surgeon, 2d Batt. 71st Regt.

A MINUTE acquaintance with all the symptoms of that ophthalmia, which at this moment proves so destructive to the British army, a disease unparalleled in the medical records of our country, cannot fail to be an object of much importance to the medical inquirer. The disease still proves a source of great uneasiness to the feelings of army surgeons; and while we are glad to find that much has been done towards establishing the cure of this disease, much yet remains; and in spite of all our efforts, a foundation is often laid to diseases, which though slow in their progress, do assuredly injure, and too often destroy vision.

In the 2d battalion of the 71st regiment, stationed, during these two years, in barracks at Glasgow, ophthalmia made its appearance, with a severity not often surpassed in Britain: of 600 men and boys, not fewer than 114 affected with this complaint, and that, too, severely, having been admitted into hospital from 22d April to 24th June.

The opportunity I had of observing the symptoms of this malady, soon convinced me that it attacked under two very distinct forms. These I at first regarded as different diseases; an opinion which the strongest evidence has since compelled me to alter, and to consider them as the same, modified by circumstances; to scrutinize which would form a difficult, though highly interesting inquiry. Any attempt to distinguish these varieties, by the general names of acute and chronic, would, from the received definition of them among surgeons, only tend to mislead.

The form which has claimed the greatest share of attention, begins with an itchy sensation of the eyelids: on a little rubbing by the finger of the patient, the whole ball of the eye may be observed to have an appearance of fulness; but it requires minute examination to discover a slight vascularity affecting the tunica conjunctiva, in a concentric line, at a small distance from the circumference of the cornea, exactly opposite to which, on the surface of that membrane, as it is reflected to cover the eyelids, a corresponding redness is observable. These vessels are of small size, but in the progress of the complaint become more prominent; and it is worthy of remark, that as the redness extends along the conjunctiva covering the eye, so it does on the surface of that covering the eyelids; till, at the place of its reflection, a white line may be perceived for a few hours, which at last is involved in the complaint. This fact, it may be remarked, has entered into the description generally given of the symptoms of this disease. I have been induced to notice this, only from its having been stated with an accurary, that might have led us to rank it as a characteristic feature of the disease, a place to which I believe it is by no means entitled. It is an appearance which bears a very strong analogy with the phenomena of inflammation in membranes of a different class, and can convey but little information concerning the disease under consideration.

In the place where the redness is originally discovered, the disease first gains its height; and the vessels of the tunica conjunctiva, by their minuteness and number, give to the eye something of the appearance called chemosis, though that state has not yet taken place; for, at this time, on pressing the eyeball with the finger, the eyelid being interposed, and removing it quickly, the whole surface becomes white, and, for the first time, the vessels of the sclerotic coat are seen increased in size, carrying red blood, and running in straight lines towards the cornea. On removing the pressure, these are first filled, and present a purple rather than red tint, immediately afterwards; those of the conjunctiva, more tortuous and large, are longer of filling, and become of a deep red. Soon after the first appearance of the symptoms now detailed, purulen-

cy commences, constituting, according to those who have described this disease, its second stage, at which time the eye puts on an appearance which I have not seen described, nor have I ever remarked it in the more violent forms of inflammation to which the organ is liable from external injury. In different points, under the conjunctiva, covering the eyeball, small patches of a scarlet hue appear of different sizes and irregular figures, which no pressure can remove, and which, I apprehend, are formed by extravasated blood: these, by a very gradual increase, unite; and thus chemosis is formed. This state of the eye gives to the countenance of one affected with it a very striking appearance; but I am far from wishing it to be understood, that this account of the early appearance of chemosis, is drawn out with the desire of its forming a pathognomonic feature; certainly, the most prominent symptom is the very early and copious effusion of a purulent-like fluid, though this can with difficulty be admitted as characteristic of the complaint, since it is by no means uncommon in the more severe attacks of inflammation of the eye, from great violence done to that organ, as in the operations of couching and extracting.

A slight feeling of stiffness, and afterwards of a painful sensation of a mote in the eye, announces to the patient, at the very earliest period of attack, that inflammation has taken place, the recurrence of which at regular periods has, though I know not with what decision, been remarked.

In general, the observations which have been made by army surgeons, tend to confirm the remark, that exposure of the eye to light, in this variety of ophthalmia, is not productive of much uneasiness; a fact, in my opinion, of high importance, as on it I believe a diagnosis may be grounded with much propriety. The texture of the cornea does not appear apt to become affected with opacity, or increase of vascularity; for, a few hours before it gives way, and the contents of the eye discharge themselves, it may be seen sunk in the hollow of a great chemosis, transparent and natural; and when it bursts, such is the rapidity of the change from the healthy state, that one would be inclined to lay aside the action of the absorbents entirely. The different appearances which the eye puts on, from the time at which the disease baffles the surgeon, would form a very interesting inquiry to a writer on morbid anatomy; but farther than the fact of rupture of the cornea I cannot enter, as unconnected with the object of these pages.

I believe, in every case of the variety of ophthalmia which I have mentioned, the sclerotic coat to be affected with increased vascularity; a fact which in my opinion has been overlooked, from the account of the symptoms having been drawn out at an advan-

ced period of the disease, when the symptoms will be placed in a very different light. Early after the commencement of the disease, a bluish, and very slightly puffy state of the eyelids, chiefly of the upper one, takes place; and as an effusion of purulent-like fluid is observed from the interior parts, a corresponding swelling may be remarked, which overlaps the lower palpebra, and hides the eye from view.

These symptoms I have described, from notes taken at the bed of the patient, during the early period of the complaint, before remedies were employed to put a stop to the malady, and before matters were too far advanced, to place the recovery of the patient beyond the power of the surgeon.

In the variety of the ophthalmia which I have just endeavoured to describe, it is well known, that venesection is attended with the happiest effects, and if performed with decision on the part of the practitioner, I have every reason to believe, cannot fail to put a stop to the disease; but the quantity to be taken away must be always considerable, and repeated as often as a return of pain shall demand. No fact in medical science ought to be more strictly attended to than that just stated, as on it the degree of success attending the treatment of ophthalmia will be found to depend. I may remark, that in no case where such treatment has been adopted, has any derangement of vision taken place in the number of men which I have had an opportunity of observing.

It remains for me to state, that the use of the lancet is not, as has been generally delivered, applicable to every case of this ophthalmia. The second variety of attack commences in the whole surface of the convex conjunctiva: in the course of a very few hours, that membrane becomes loaded with enlarged vessels, running tortuously towards the cornea, which in a little time may be seen affected, to the extent of a line in its whole circumference, with a slight elevated vascular border; the eyelids, of a red colour in the place occupied by the conjunctiva, feel stiff and uneasy; exposure of the affected organ to light gives considerable irritation; but it seldom happens that pain warns the patient of his complaint; lachrymation, but no purulent discharge takes place; and chemosis is never present, nor can the vessels of the deeper seated membranes be discovered affected, as in the former variety. If the disease be permitted to go on, and, as I have noticed, still more if venesection be employed, it presents day after day the same appearance; the eyelids become thickened, and slightly everted; and the cornea begins to suffer, either from the encroachment of the border affecting its circumference, already described, or from the deposition of matter between its laminæ

and consequent ulceration, hypopion, and staphyloma, generally pretty near to the place corresponding to the pupil.

It is after an attack of this kind that the eye continues weak, weeping, and unable to bear exposure to the light, and suffers so repeatedly from what has been called relapse.

In what regards the cure of this variety of the complaint, I have to mention that general venesection, so far from curing, does, in my opinion, tend to weaken the vessels of the conjunctiva, and render the disease more obstinate; and as it is of no avail, must be deemed hurtful.

If I mistake not, this is the form of the complaint which has been so much benefited by scarifying the vessels of the tunica conjunctiva, and dropping immediately afterwards on the eyeball a composition of a stimulating nature; the author of which practice (an army surgeon) I cannot at this time remember. Scarifying has been condemned in purulent ophthalmia in general; but more minute attention to the varieties which I have endeavoured to point out, will, in my belief, correct the opinion which has perhaps been too hastily, and too generally delivered. I shall be sorry to think that such a statement should seem to convey arrogant decision. I only wish it to be understood, that, so far as I have observed, (and I think there is concurring evidence of the truth of the assertion), scarifying the conjunctiva has at least been of more use than any other remedy. It fails, however, it must be confessed, and that frequently; for in defiance of every remedy, as above stated, a slow and insidious vascularity of the cornea takes place, which in no long time destroys vision.

Disappointed by every method hitherto recommended, I endeavoured to make the eye, affected with the latter variety, assume the inflammatory action of what has been called purulent ophthalmia, and to this I applied the usual remedy, venesection. In several cases, the practice has proved successful, not a single enlarged vessel remaining at the end of a fortnight. How far it may answer the purpose intended, I have not yet had sufficient evidence to enable me to decide. Daily reports of the practice, and its effects, may enable me at a future period to lay it before army surgeons.

Glasgow Barracks, Sept. 5th 1810.

II.

An Essay on Staphyloma pellucidum conicum. By ROBERT LYALL, Surgeon, Paisley; Member of the Royal Physical Society of Edinburgh, and Corresponding Member of the Literary and Philosophical Society at Manchester, &c.

THE disease of which I am to treat in the following pages, has seemingly but little engaged the attention of medical men. It is a disorder, however, which attacks one of the most important organs of the human body; and consequently the investigation of its pathology must be an object worthy the consideration of every practitioner.

The first mention relative to the disease hereafter described, which I have observed, is in the French translation of Scarpa's work on the diseases of the eye, by Leveillé.

Under the section of that work devoted to the consideration of Staphyloma, we find a note by Leveillé which I shall transcribe.

" Il m'est arrivé n'aguère, d'observer un singulière maladie de la cornée; je ne saurois trop dans qu'elle classe de maladie des yeux la ranger, si on ne peut la rapporter au staphylôme. Chez un dame de trente-cinq ans, ayant les deux yeux naturellement saillans, saine d'ailleurs, le centre de la cornée des deux yeux se souleva graduellement, au point que cette membrane ne formoit plus, comme à l'ordinaire un segment regulier de sphère, mais un cône notablement saillant, et terminé en pointe dans son milieu. La cornée de chaque œil regardée de côte sembloit un petit entonnoir transparent, dont la point étoit tournée en dehors. Dans certaines positions de l'œil, il sembloit que la pointe de cône fut un peu moins transparente que le reste de la cornée; dans d'autres, ce qui etoit nébuleux, l'etoit si peu, qu'il ne pouvoit faire un obstacle notable à la vision. En plaçant l'œil directement contre un fenètre, ce point saillant du centre de la cornée, plutôt que de transmettre la lumière, la refléchissoit avec une telle force, qu'elle sembloit étincelante; et comme ce phenomene avoit lieu precisement contre la pupille, il en resultoit qu'etant retrécie dans un grand jour, elle ne permettoit à la malade que de distinguer confusément les objets. "

Dr Edmonstone, in his excellent treatise on ophthalmia, barely states, that he has seen an affection of the eye similar to that above mentioned by Leveillé; and more lately, Mr James War-

drop, in his valuable essays on the morbid anatomy of the human eye, at some length describes the same disease; and merely, I suppose, on account of its appearance, has denominated it *conical formed cornea.*

Under that denomination, Mr Wardrop notices two cases, and adds some remarks regarding the derangement of vision produced by such an affection; but says nothing relative to the nature or cause of the disease. Leveillé is equally silent as to the last mentioned points; and confesses, that he did not know under what class of disease *conical cornea* ought to be arranged.

Before proceeding farther, I shall take the liberty to relate four cases of *conical formed cornea;* and afterwards will add some remarks on the nature, &c. of the disorder.

Case I.

Phœbe Greenalgh, æt. 28, was admitted a patient of the Manchester Dispensary, on account of bad vision.

In a front view, her eyes have a peculiar dazzling, or rather sparkling appearance; and, in the language of the vulgar, it would be said that she had "very full eyes."

In a lateral view, the corneæ are observed to have assumed a conical form,* and resemble a piece of pure crystal, being completely transparent. The cornea of the left eye is more conical than that of the right. The iris of both eyes performs its usual motions regularly.

The following observation, made by Dr Brewster, respecting one of Mr Wardrop's cases, is applicable to both of the corneæ. "In every aspect in which the cornea was viewed, its section appeared to be a regular curve, increasing in curvature towards the vertex." With one eye, the patient can distinguish colours at the distance of 6 or 7 inches. When she looked at some large buildings, or a number of shrubs at some distance, she took the former to be one mass, similar to a rock, and the other to be one tree. At the distance of 2½ feet, she says she can see the whole of a violin hanging against the wall; but at any greater distance, her view is confined to a part of it; and even that part is perceived obscurely.

When she looks at a candle about 30 or 40 yards off, sometimes she sees a number of candles, sometimes only one or two, with a sparkling appearance around; and at other times she

* Similar to what is represented by Mr Wardrop in his seventh plate; but to a greater degree.

compares it to the sun; but at the distance of 14 inches, it appears to her single and distinct.

She can name the letters of ordinary print slowly, when about 1½ or 2 inches from her eyes.

Having placed the patient in a dark room, on holding a candle at the distance of a foot from one eye, while the other was covered; and observing the changes which the reflected image underwent, I perceived, that when it passed through the centre of the cornea, or *apex of the cone*, it was smallest, but gradually increased in size, the more distant it was from that point, *i. e.* the nearer the image was to the juncture of the cornea with the sclerotica, it was the larger.

P. Greenalgh was admitted a patient of the Dispensary on the 31st of January 1809, and had a collyrium and some alterative calomel pills ordered for her. On the 5th February, while sewing, she was suddenly attacked with severe headach, and great pain in the left eye, accompanied with a copious discharge of hot tears. She became easier next morning, and continued so till the 7th of February, when, on examining the left eye, the apex of the cone was observed to be quite opaque; but the right eye is exactly in the same state as when I saw her last.

She was made an infirmary patient, and at the time of admission complained of slight headach.

Different collyria and internal medicines were used with the intention of relieving her.

Some days afterwards, by applying the pencil caustic gently to the cornea, a violent action of the vessels was produced, and the opacity of the cornea partly disappeared. I mentioned my opinion, regarding the nature of this patient's complaint, to Mr Hamilton, and obtained his leave to evacuate the aqueous humour of the left eye.

About 1 o'clock p. m. I punctured the cornea near its juncture with the sclerotica, and evacuated a large quantity of aqueous humour. The anterior margin of the iris immediately projected forwards, and the cornea fell down upon it, so that the conical appearance still in some degree remained.

I ordered the patient to bed, and desired the nurse to apply an astringent collyrium assiduously to the eye. A purge to be taken at night. About 4 p. m. the cornea was partly distended, and she saw better than usual. At 10 p. m. the cornea was still more distended, or, as I calculated from appearance, about two-thirds of the aqueous humour was regenerated; and the patient was astonished to find that she saw better than she had seen for some years. Delusive moment! Next day the cor-

nea was completely distended, and her vision equally bad as before the operation.

To give the whole history of this case would be very tedious, and but little interesting. It is therefore sufficient at present to state, that frequently the aqueous humour was evacuated; that strong astringent collyria were used daily, but more particularly immediately after the cornea was punctured; that the patient was bled before the operation; and also, that the bowels were often well evacuated.

The ultimate result of this treatment was, that the cornea partly lost its conical appearance, and then resembled what we term *a prominent cornea;* but the vision of the patient was not greatly improved.

After remaining a considerable time in the infirmary, the patient became anxious, and was discharged with her eyes nearly in the same state as when she was admitted a dispensary patient; so that although the disease was not cured, yet the opacity which took place in the cornea, as already mentioned, was nearly removed.

Case II.

John Bentley, æt. 28, was made a patient of the Manchester Dispensary in August 1809.

His eyes have the same appearance as those of the first patient; but the disease is farther advanced, *i. e.* the corneæ are more conical.

In this case the corneæ seem to be equally affected, and their sugar loaf form may be readily observed, even when the eyelids are shut.

In both eyes, the centre of the cornea appears to be the apex of the cone. The iris of both eyes readily dilates and contracts.

The vision of this man is so limited, that he cannot see a small object distinctly above one and a half or two inches distant. He is able, however, in general, to walk in the streets without stumbling against any body.

At times his vision is confused.

Case III.

Mr J. D. medical student, æt. 20, recollects, that about sixteen years ago when he was at school, the master told him that he was short-sighted.

From all the accounts which Mr D. can obtain, he thinks it probable that he has always been purblind.

About four years ago, he became more conscious of the limita-

tion of his vision, and since that period, he thinks his sight has gradually got worse. Mr D.'s relations have of late noticed, that when reading, he holds the book much nearer than he was wont to do formerly.

A medical gentleman who examined this patient, told him that he had incipient cataract in each eye.

On examination, I perceived that the cornea of both eyes was of a sugar-loaf figure, but not so conical as in the two former cases. On one of the corneæ, about one-eighth of an inch anterior to its juncture with the sclerotica, a transparent vesicle, (staphyloma partiale) the size of a small pin head was situated. In certain lights when the iris was dilated, consequently, the vesicle was opposed to the pupil. The phenomena of the vision of the one eye were similar to what are noticed in Greenalgh's case; but with the other eye, on which the vesicle has formed, the patient saw bodies in a very confused state, except when the iris was much contracted.

Being at Edinburgh, I had an opportunity of showing Mr D. to Dr Thomson and Mr James Wardrop, who agreed with me in recommending the use of a vitriolic collyrium and concave glasses; from which the gentleman afterwards derived much advantage.

Case IV.

Joseph Diggles became a patient of the Manchester Dispenpensary in February 1809.

His eyes and the state of his vision were similar to P. Greenalgh's. Mr Gibson (whose attention I am proud to acknowledge, and whose friendship I much value) punctured the cornea of one of this patient's eyes, in the presence of Messrs Ransome, Ainsworth, a number of the pupils of the hospital, and myself; and it appeared that there was an increased quantity of aqueous humour contained in the anterior chamber of the eye, and that no more than the natural thickness of the cornea intervened between its outer surface and the anterior edge of the iris.

Pathology.—For my own part I always conceived the disease, of which we have been speaking, was entirely owing to the size and form of the cornea, in consequence of an increased quantity of aqueous humour being contained in the anterior chamber of the eye; and this idea seemed to be confirmed by the puncturing of the cornea, as above noticed.

I am therefore induced to assign the same cause for conical formed cornea, as for dropsies in general; for if an unusual quan-

tity of aqueous humour be secreted, or if there be any sudden effusion of serum into the chambers of the eye, the cornea will be much distended for some time, but at last will yield, and become prominent. It may be asked, why the cornea takes on a conical form?

I think the question may be easily answered, since Mr Everard Home, in the Philosophical Transactions, informs us, that, "in stretching the cornea, the central part yields most readily to the power applied." Cæteris paribus then, it follows, that the cornea must assume a conical form, when it yields in consequence of distension internally. In the same manner, we may explain the reason why staphyloma is generally, in its incipient stage, of a sugar-loaf figure.

Notwithstanding the above reasoning, I must here mention, that, in some cases, the apex of the cone is not formed exactly by the centre of the cornea; but so near to it, that it requires considerable attention to discover the fact.

In the disease of which we have been treating, the cornea, except in case 3d, has always appeared to me to be quite in a healthy state: though perhaps, in some cases, it may be in a state of debility, either previous to the commencement, or during the continuance of the disorder.

I am almost certain, that the cornea is not thickened by the disease; on the contrary, I am inclined to suppose that it is thinner than usual.

Conical formed cornea is a disease which seems to increase imperceptibly; the cornea gradually, at first, becoming prominent, and as gradually assuming the conical shape.

I have no doubt that, in some of the cases which have come under my observation, the disease had existed for some years previous to the time that the patient complained. In other cases, I have traced the origin of the complaint to inflammation of the eyes.

In all the patients which have been under my review, both eyes were more or less affected. Often we find the cornea of one eye of a conical figure, while that of the other is merely in the state of what we call a *prominent cornea*, the general cause of limited vision. From observation, I am led to think, that neither the crystalline lens, nor the vitreous humour, are affected with disease, when the cornea becomes of a conical figure.

Treatment.—The modes of treatment adopted, with a view to cure the disease in question, have been already detailed.

From the result of my practice, I much fear, that *conical formed cornea* may be ranked with the incurable maladies. If, therefore,

we could prevent the increase of the disease, it would be an object of the first importance, and, I am happy to add, that I believe, by proper treatment, the progress of the disorder may be checked.

For the following information, I am highly indebted to Mr Gibson, surgeon to the Manchester infirmary.

In four cases of conical cornea which were under this gentleman's care, a complete cure was not attempted; his aim was to prevent the increase of the disease; and for this purpose, he ordered a solution of alum in water, or a decoction of oak-bark to be used frequently, as a collyrium.

In these cases, no increase of the malady took place after the use of the astringent application; indeed, one of the patients thought that his vision improved by this treatment. It is worth remarking, that two of Mr Gibson's patients were sisters.* Mr Phipps of London, who has had an opportunity of watching the progress of several cases of *conical formed cornea*, remarks, that "it is a change which sometimes takes place at the age of puberty; and when the cone is once complete, the disease seldom makes any further progress, or suffers any other change, than that the apex sometimes becomes opaque."

Although Mr Phipps's remarks are not altogether consonant with my own observation, yet I reckon them very valuable, and when repeated to patients, will afford them much comfort; as it is a general fear, that their vision, in the course of time, will be entirely lost.

The patients obtain great relief by the use of concave glasses, which have a greater power than those most commonly used for the *prominent cornea*. I have given glasses to some, varying in power, from what are called by the opticians No. 4. up to No. 16. The individual must be allowed to try glasses of different degrees of concavity, and he will be able to choose those by which his vision is most improved. In most instances, it will be necessary to have the two glasses of different powers, as I have stated that, in general, the corneæ have different degrees of convexity.

My last patient got the glass for the right eye of No. 4. and that for the left eye of No. 7.

In some cases, I have given calomel, &c. internally, with a view to excite the action of the absorbent system, and thus remove the increased quantity of aqueous humour from the anterior chamber, but I am sorry to say, without the least success. Blisters were tried, without producing any change whatever on the eye.

* See Wardrop's work.

Diagnosis.—The *conical formed cornea* is a disease which cannot be mistaken for any other, if attention be given to the form of the cornea, together with its peculiar lucidness, and to the derangement of vision which follows in proportion as the disease is of long or short duration.

Vision.—An attempt to explain the theory of vision, in the disease of which we have been treating, has been made by Dr Brewster.—See Mr Wardrop's work.

However just Dr Brewster's explanation may have been, in one of Mr Wardrop's cases, it cannot at all be applied to the cases which I have seen. He says, that probably spherical eminences and depressions exist in the cornea, so as to imitate a polyhedron.

In the cases given, * as well as in a number of others, it was quite evident that there were no such irregularities in the cornea as Dr B. alludes to. I am convinced, both by experiment and observation, that the depraved, as well as the multiplied vision, is solely owing to the form which the cornea has assumed, and consequently, that we are to explain the phenomena of the vision in this disease upon the same principles as in the myopiæ.

I think my opinion is much strengthened, by considering, that, within a certain range, objects are perceived single and distinct; and that the patient's vision was much lengthened by the use of concave glasses. If any thing like the surface of a polyhedron was formed in the cornea, as Dr B. supposes, would objects appear single at any distance whatever?

Name.—The words *conical formed cornea*, used by Mr Wardrop, do not at all convey a proper idea of the disease already described, as we often observe the cornea to take on this shape in that unsightly malady, *staphyloma*.

We have a disease, termed staphyloma pellucidum, in which the cornea remains transparent, and retains its spherical shape. Now, as the chief apparent difference between this disease and the *conical formed cornea*, is in the form of the cornea, I propose to nominate the former disorder

Staphyloma pellucidum sphericum; and the latter

Staphyloma pellucidum conicum.—If a shorter name could be suggested, certainly it would be preferable.

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* Excepting Case III.

III.

Case of Tetanus successfully treated. By Mr GRIMSTONE, Surgeon, Royal Navy. Communicated by Mr John Livingstone, Surgeon to the British Factory at Macao, China.

MR CHARLES WATTELL, clerk of H. M. brig Diana, aged about 30 years, of a spare habit, was received into H. M. hospital ship, Wilhelmina, on the 20th of May 1809, for the cure of a wound, caused by a pistol ball passing through the palm of the right hand. The integuments were much lacerated, and the middle metacarpal bone considerably shattered.

Upon first viewing the case, I advised amputation above the wrist, giving him my reasons for so doing, founded on the great probability of a locked-jaw taking place, particularly in this climate; but he would not consent. I then dissected out both parts of the metacarpal bone with the finger, and brought the integuments together, on both sides of the hand, by stitches; applied soft dressings, and gave extract. rhab. gr. ij.

22d.—Considerable heat; costive; hand and arm very painful.

℞. Mist. nitros. ℥vi.
Tinct. opii gtt. xxx. ft. m.

Capiat cochlear. ij. tert. q. q. hor. Vesp. extract. thebaic. gr. ij. et cras mane sol. sal. Glaub. ℥iij. which had the desired effect.

24th.—Much less pain; pulse moderate; skin cool, and the bowels open; dressed the wound, which looked and discharged well.

℞. Pulv. cinchon. ℥ss.
Spt. vin. gall. ℥iss.
Aquæ puræ ℥viss. ft. mist.

Sumat. ℥i. tert. q. q. hor. Vesp. extract. opii gr. ij.

He continued to do well until the 8th of June, when the wound was nearly healed, and I observed signs of tetanus, such as difficulty of swallowing, turning the head, alteration of speech, and the jaw slightly contracted. On inquiry, I found he had general spasms for the two last days past; particularly violent about the neck and back, which he had neglected to tell me of before. I gave him tinct. opii gtt. xx. statim, and repeated ten more every hour. Again pressed him to submit to amputation, but he still

refused; consequently I applied a pledget, dipped in equal parts of tinct. opii and spt. terebinth. to the wound.

9th.—The jaw completely set, so as not to admit of fluids but with difficulty; spasms general and violent; no stool since the 7th inst.

℞. Tinct. opii ʒi.
Aq. puræ, ℥viij. m.
Capiat. ʒi. omni hora; put him into the cold bath.

10th.—No alteration. Continued the mixture as before, with tinct opii. ʒiss. and tinct. digitalis ʒss:

℞. Calomel. ppt. gr. viij. statim sumend.
Vesp. solut. sal. Glaub. ℥iiss.

11th, 12th, 13th.—Spasms extremely distressing; costive. Ol. ricini ʒx. statim.

℞. Tinct. opii ʒij.
Aquæ puræ ℥viij. m.

Capt. ut antea vesp. Bowels open. Cont. mist.

14th.—I put ʒiiss. tinct. theb. to the mixture, and on the 17th, ʒiij, during which time his sufferings were very great. I had kept the bowels open. Wound healed.

This morning, the spasms were frequent, but certainly not so violent: I now, from the length of time, and the diminished state of the symptoms, began to entertain some hope. Continued the medicine, as above, till the 24th, without any very material alteration. Pulse generally quick, and inclined to fulness. Previous to my visiting him this evening, my assistant told me that the spasms had entirely gone off. On my going to him, I found the jaw much relaxed, and he said he was free from pain, but to all appearance much intoxicated; and, on further inquiry, I found he had been very much so in the earlier part of the day. I directed the mixture to be continued as usual. The next morning, (on)

25th.—The spasms were general, violent, and the jaw contracted more than ever; had one stool; pulse not so full; profuse perspiration, and complained of languor. I continued the mixture, as above, every hour, and gave extract theb. gr. i. every two hours, and rather better than an ounce of good spirits *every hour*. I continued this until the 28th, when he was evidently better; Cont. med. July 1st.—Still better, could take slightly of solids, and use the jaw without bringing on the spasm. ℞. Ol. ricini ʒx. statim; Cont. mist. and gave gr. ij. of the extract every second hour.

From this day, he gradually recovered. I made no alteration in his medicines, excepting omitting a part of the spirits till the 10th, when he could open the mouth, and make use of the jaw

as well as ever. The debility was great, and now and then a slight spasm takes place, from the right shoulder to the temple of the same side; but it diminishes daily.

During the progress of the disease, I observed the quantity of opium given, neither affected the head, nor procured sleep; he generally complained of want of rest. The tincture was made by myself, and very good. I took the idea of preferring it to the extract from the writings of Professor Mursinna of Berlin. I also observed, in the use of the cold bath, that although the interval was somewhat lengthened, the spasm followed with greater force; and I am much in doubt whether the digitalis had not a similar effect.

Whether we may attribute the success of the case to the stimulus kept up by the spirits, or to the antispasmodic effects of the opium, I am at a loss to know; I should rather conclude it was the combined action of both; and although deserving of further trial, it would be dangerous to depend on the spirits alone.

I must further observe, that my patient was one who indulged freely in the use of spirits when in health; consequently we might expect its stimulating qualities would have less effect on him, than on one who had not done so.

VI.

Brief Outline of a Plan for Diminishing the Prevalence and fatal tendency of Hooping-Cough. By Henry Edmonstone, Surgeon, Edinburgh.

The mortality which hooping-cough produces among the children of this country, is a perpetual source of sorrow and anxiety to all classes of the community. Its ravages are not confined to the victims which it carries off in its progress; in many of those who escape its immediate effects, it lays the foundation of complaints that prove equally destructive, or it induces a predisposition to pulmonary affections, which otherwise might never have existed.

No period of life is altogether exempt from the disease, although the constitution appears to be most obnoxious to its attacks during infancy and childhood. It occurs in every situation, and at all seasons of the year. It possesses a period of rise and decline,

and is well known to be one of those diseases that affect the system only once during life.

As the pathology of the disease is but imperfectly understood, and the means of cure extremely circumscribed, it becomes necessary to endeavour to compensate these defects, by taking advantage of certain peculiarities of action, to which the contagion is known to be subjected; and from thence to deduce such principles of preventive treatment, as shall tend to counteract the baneful influence of the disorder, and render it less generally diffused.

One of the best established and most remarkable of these peculiarities in the history of hooping-cough, is, that the severity and danger attending the disease, are in the inverse ratio of the age of the patient; or, in other words, the younger the patient, the greater is the hazard to which health and life are exposed. In proportion as the constitution acquires vigour and stability, the danger becomes comparatively trifling; and after the age of puberty, ceases almost entirely, together with the susceptibility of the disease. Another circumstance, with regard to the operation of the contagious principle, particularly deserving of attention, is, that hooping-cough is observed to be much milder in warm than in cold climates; and it would seem to be in conformity to this law, that the disease is found to be more severe in this country during autumn and winter, than during spring and summer. It is not necessary here to enter into any discussion respecting the causes of these differences, in the degrees of danger and severity, arising from age, climate, or season. It is sufficient that experience has established the fact of their uniform occurrence. The two important practical rules which result immediately from them, and to which I am, on the present occasion, particularly anxious to direct the attention of the public, are the following.

I. *To use every precaution to guard against the hooping-cough, during the very early stages of life; and,*

II. *To avoid its attack during the unfavourable season of the year.*

The possession of means, therefore, that could subject the disease to our controul, so far as to enable us to select the favourable periods, with respect to age and atmospheric temperature, must necessarily have the effect of lessening the violence of the disease; and consequently, of contributing to the preservation of many lives, whose loss we must otherwise continue to deplore. Much of the continued and extensive prevalence of hooping-cough, and many of the fatal consequences resulting from its agency, are undoubtedly to be attributed to extreme inattention on the part of the public at large. Infected children are suffered to mix with their companions in the streets, at play, and at

school, without any intimation being given to the uninfected of the existence of the disease. Almost every other contagious disorder manifests itself by some obvious symptom or appearance, or its operation is so violent, that the patient is confined at home until the risk of communicating it has entirely ceased. But hooping-cough, during the intervals of its paroxysms, exhibits no external marks by which its presence can be detected; the general health is seldom or never affected while the patient is able to go abroad; and consequently, the healthy often mingle with the diseased, without being aware of the danger to which they are exposed. There are no means of ascertaining whether or not the disease exists, but by actually witnessing a fit of coughing; and in general, before this can have taken place, the disease has been imparted, and escape rendered impracticable.

In other instances, where the intervals between the paroxysms are very protracted, there is no opportunity afforded of observing a fit of coughing; and the contagion may thus be carried, by means of a third person, and communicated, perhaps, to a whole family of children, without the possibility even of a suspicion being entertained.

Sources of contagion are thus generated and multiplied to an indefinite extent, and with powers of propagation so indiscriminate in their operation, that they can scarcely fail, in the cold and variable climate of this country, to be sometimes productive of the most fatal consequences.

As the disease, then, cannot be recognized until too late to prevent its attack, the framing of some expedient, by which those labouring under it could be easily known and avoided, would seem to present the most simple and effectual means of security against its insiduous mode of invasion, and of rendering its dissemination less extensively injurious.

I would therefore propose, that persons affected with hooping-cough should wear some conspicuous article of dress, by which they might be discerned easily at a distance, and an opportunity, by that means, offered to all who might be so inclined, of keeping beyond the sphere of the contagion. A red hat, cap, or ribbon, for example, might be worn for this purpose. As ornaments of this colour are seldom used for the head, the facility of distinguishing the infected persons would be rendered so much the greater. Children ought not to be permitted to go to school or to church, while suffering from the disease; nor should they, after having been affected with it, be considered admissible into any seminary or situation where numbers are assembled, unless they can produce a certificate, signed by the medical attendant of the family, stating that the danger of infection is over.

As it is impossible, without the interference of the legislature, to render compulsory the above regulations, the carrying them into effect must be left entirely to the good sense and humanity of the public. These, if duly exerted, will be found fully adequate to the purpose, as every individual, however indifferent or careless, cannot but be aware, that the neglect of any of these conditions, must subject him to the reproach of his fellow-citizens, for having violated, not only his obligations to society, but also the sacred duties of humanity.

With a general feeling of this kind on the public mind, the competency and success of the plan I have proposed, would soon cease to be doubtful. One advantage, I presume, it will be allowed to possess. It may be adopted with equal facility by all ranks and descriptions of people; for it involves neither expense nor inconvenience.

I appeal, therefore, with confidence, to parents, guardians, and all who possess influence, and who are interested in the fate of the rising generation, to give it their support, and to promote its favourable reception, by their example.

My expectations may perhaps be deemed visionary; but I am, notwithstanding, strongly impressed with the belief, that, by a strict adherence to the above plan, there are rational grounds for indulging the hope, so consolatory to every feeling mind, that the hooping-cough shall be divested of many of its dangers, and instead of being anticipated with terror and alarm, it shall at last come to be viewed with indifference.

If the preceding observations shall prove in any respect instrumental in promoting so beneficial an object, the design with which they have been written will have been fully and happily accomplished.

Sept. 1810.

October 2.—Since writing the above, I have been much gratified on seeing, in some extracts, published in the 24th Number of the Edinburgh Medical and Surgical Journal, from Jackson's Account of Marocco, the following facts mentioned.

"Leprosy being considered epidemical, those who are affected with it, are obliged to wear a badge of distinction whenever they leave their habitations; so that a straw hat, with a very wide brim, tied on in a very particular manner, is the signal for persons not to approach the wearer." If such a precaution be considered necessary for the prevention of leprosy, which at least discovers itself by the "total want of eyebrows" in those who are, or have been affected with it, how much more necessary is it in hooping-cough, which is so much more destructive to life, and in which

there is no appearance to indicate its presence? Indeed, some such contrivance might be beneficially applied to all contagious diseases, each disease being distinguished by its peculiar device; and although we could scarcely expect to limit, in any very material degree, the aggregate dissemination of any disease, we might, at all events, be able to render it less indiscriminate in its operation: besides, the certainty of exposure having taken place, would, by preparing us for the attack, put it in our power to counteract its effects.

The range of action of this, and of every other contagion, is perhaps more limited than is generally imagined. The author formerly quoted, in his account of Marocco, says, "My daily observation convinced me, that the epidemy (a highly malignant species of plague) was not caught by approach, unless that approach was accompanied by an inhaling of the breath, or touching the infected person."—Med. & Surg. Journal, Vol. VI. p. 464.

V.

Inquiry into the Exactness of some Statements, made by Messrs Nagle and Wilson, Naval Surgeons, respecting their extraordinary success in the Treatment of Yellow-Fever. By a Naval Surgeon.

In the 2d Vol. of Currie's Medical Reports, is a letter from Mr Nagle, surgeon in the Royal Navy, giving an account of his employment of the affusion of cold water in a fever that occurred on board the Ganges, in the West Indies. Mr N. gives it as his opinion, that the fever was that which has commonly been described under the title of yellow-fever. *One hundred and twenty cases* of this fever occurred on board the Ganges, and, under the treatment of Mr N., only *two* died. Now, in comparing this very great success of Mr N. (very great in any species of continued fever) with the experience of other authors who have written on the yellow-fever, and with what we have experienced in our own practice, and in that of others, it is impossible not to entertain a doubt that there has been some deception in the case. The disease in the hands of Mr N. proved so mild, so manageable—to all others it has proved so fatal and untractable, that we cannot conceive for a moment, that the difference of his *practice only*, from that of others, could have made such a wonderful difference in the

result; particularly, as *we know*, that the practice he says he followed, has been employed times out of number in the *yellow-fever* without success. Before Mr N., we believe that the cold affusion, as directed by Dr Currie, was not so properly or so pointedly employed as it was by him; but since he wrote, it has had ample trials, unhappily with a result far different from that which it had in the fever on board the Ganges; and although it is undoubtedly one of the most powerful remedies we possess in yellow-fever, yet it falls far short of what its powers in the contagious fever of Europe had led medical men generally to expect. From all this, (I repeat it), we can hardly refrain from suspecting that Mr Nagle did not treat cases of *yellow-fever*, of the fever described by Dr Moseley and Dr Jackson, and other good authors, of the fever which still continues to carry off so many of our soldiers and sailors in the West Indies.

From what has been said, it may be inferred with safety, that Mr Nagle's discrimination, or his veracity, will hardly fail to be impeached by all those who have treated, and who still continue to treat, this fever with a degree of success so vastly inferior to that mentioned by him. The only way, as appears to me, that Mr Nagle can remove the imputation, is by publishing some cases of the fever at length. The full detail of symptoms in the early stage, † (if the disease did not proceed beyond this), will enable the experienced to judge of the nature of the disease. And I think an account of the two cases that proved fatal, would be decisive of the question of the identity of the fever of the Ganges with the endemic of the West Indies. It is mentioned that yellowness did not occur. But although yellowness of the surface is not a universal symptom of the disease, it seldom or never proves fatal, without exhibiting, in the combination of its phenomena, signs characteristic of itself.

It is to be hoped that Mr N. will not withhold the information required. His honour and his humanity are both interested; for surely, *if he had* such great success in the treatment of the *yellow-fever*, he must have employed means as yet untried by other practitioners.

In the same volume is given the result of the practice of Mr Wilson, surgeon of the Hussar, in this fever also (as is said), extracted from Dr Trotter's Medicina Nautica. Out of *eighty-three* cases of fever Mr Wilson *did not lose one*. This is still greater

† A general statement of the first symptoms, in these cases, is indeed given; but these, although certainly generally present in yellow fever, are more or less found in all fevers.

success than Mr Nagle's. But the judgment of Mr Wilson lies under still greater imputations of inaccuracy than does that of Mr Nagle; because, in the account itself of the disease by the former, we have, as it were, intrinsic proof that it was *not* the yellow-fever; whereas, in the report of the latter, "'tis the *success* alone that staggers our belief." Mr W. says the fever was contagious; now, we know that the yellow-fever is *not* contagious. And if it be said that Mr W. might have been deceived with regard to its contagious nature, as so many others have been, we reply, that the fact of its spreading among the crew of the Hussar, in the manner it did, and the circumstance of its having been carried from Guadaloupe to North America, prove the contagious nature of the fever. Consequently this was not the yellow-fever; for, however medical men in England, who have never seen this disease, or who, having seen it, have had their judgment warped by theory and prejudice, may maintain the contrary, we now certainly know, that *the yellow-fever is* not *contagious.* Besides, the comparison of his practice and success, with the practice and success (or we rather fear, it ought to be stated want of success) now witnessed in the West Indies, must inevitably lead us to the same conclusion. Mr W.'s practice was to bleed early, employ the cold affusion, and give emetic tartar. Now, the two former modes of cure are those actually employed at present, with a very different effect from what Mr W. experienced, while the third is universally abandoned, from experience of its ill effects. From these considerations, I think we are warranted to conclude, that Mr Wilson did not treat patients labouring under yellow-fever.

This question of the real nature of the fever which Mr W. treated, on board the Hussar, excites a livelier interest, as it is adduced by Dr Blane in his letter to Baron Kloëst, (Ed. Med. & Surg. Jour. Vol. III. p. 385.), as a conclusive proof of the contagious nature of yellow-fever. Fortunately, however, we did not want this confutation of Mr Wilson's opinion, to disprove the contagion of this fever.

I consider the present inquiry as of some importance, inasmuch as the successes related by these authors, are apt to give rise, in those unacquainted with the disease, to suspicions unfavourable to the character and abilities of other surgeons, who, at present, treat the fever in question unhappily with very different event. I have, therefore, upon returning from the scene of this disease, thrown together the above observations, trusting you will give them a place in your widely circulated Journal; a medium through which they are most likely to fulfil the intention with which they were written.

VI.

Description of a very singular and complicated Case of Malconformation of the Genital Organs, Rectum, &c. By J. T. Conquest, Assistant-Surgeon to the Royal Marine Forces, and Member of the Royal College of Surgeons.

E. F. was a few months since delivered of an infant, of the natural size of a small nine months fœtus, which presented the following curious deviations from Nature's usual course. It survived the birth three days. The whole body of the child was emaciated, and great deficiency of vigour was very perceptible; the muscles were of a loose flabby texture; the lower extremities were considerably distorted, the feet being turned completely inwards. On the second and third lumbar vertebræ, there was spina bifida situated, of the size of a common orange.

The umbilicus was lower than usual, and on the right side; it did not appear to perforate the linea alba in its natural place, but came out nearer the edge of the rectus muscle; there was a considerable elevation, both on the upper and lower part of its perforation.

The anus, in its natural situation, was imperforate, nor was any appearance of the termination of the rectum perceptible, when exertions were made, by crying or voiding the urine. About midway between the umbilicus and symphysis pubis, the *rectum* protruded about three inches from the abdomen, and was covered by the common integuments, which were regularly continued on from the abdomen, and reflected over its whole length. The peristaltic motion was constantly going on, and the meconium were voided through it. It was much thicker than the rectum of an adult, supposing it to have the addition of a cuticular covering. It appeared to be surrounded with a strong muscle, which, when the internal or villous coat suffered the least attrition, contracted with an unusual degree of force, amounting to a temporary obliteration of its canal. The sphincter was perfect at its termination, where it was for a small distance inverted. The inversion of its lower part rendered the internal coat so distinct, as to admit of its being minutely examined. The villous coat was extremely red, vascular, and tinged with blood of a florid hue. It was so extremely sensible, that when slightly irritated with a probe, a determination of blood took place to the

part, and the peristaltic action increased almost to an erection; it was studded with innumerable and very large glands, which secreted a large quantity of mucus.

The genital organs presented an appearance equally singular with that of the parts already described. Their structure was so complicated, that it was almost impossible to form any correct opinion of the sex; neither predominated; and there appeared an admixture of both. That which would at first sight have been pronounced to be a scrotum, was considerably larger than one of the common size. It extended above the pubes, and was smooth on its surface, without the least appearance of raphe, nor was any perinæum to be distinguished. Nothing which bore the least resemblance to testes could be discovered, and the scrotum or tumor was filled with cellular substance, of a soft spongy texture. On the most minute examination, it evidently was not an adhesion of the opposite sides of the labiæ, from its size, and from there being no mark of union. On the upper part of this tumor was a small prominence, perforated with a fissure, so small as to render the introduction of a probe impracticable: this was the orifice of the urethra, and bore a near resemblance to the meatus urinarius; it had no appearance of prepuce, and was not in any respect similar to the penis. The urethra could be traced through the soft cellular substance, with which the tumor was filled, as far as the symphysis pubis; it was unusually hard, and felt like a curved probe. There was a constant involuntary discharge of urine, which exuded from the fissure, *guttatim;* except on any violent exertion of the child, when it flowed in an excessively fine stream or jet. In cases which have been described in some respects similar to this, a separation of the bones of the pubes has been mentioned; but in this case there was no such appearance.

I have given a plain narration of facts, and avoided making any remarks. The case appears altogether a very singular one of the kind. It occurred to my father, who, in an extensive practice of thirty years, has seen several with malformation of the urinary and genital organs, yet never met with one which presented so great a variety of unnatural appearances. No doubt but the internal parts were much deranged; but the prejudices and suspicions of the parents were so great, as to preclude the possibility of obtaining any thing more than an external examination of the body.

Chatham, 11*th October* 1810.

VII.

Sketch of a Plan for Improving the Medical Department of the Navy.

" Tu, dum tua navis in alto est,
Hoc age."——— Hor. Ep. xviii. l. 37.

" Hoc opus, hoc studium parvi properemus et ampli,
Si patriæ volumus, si nobis vivere cari."
Hor. Ep. iii. l. 28.

On a former occasion (Ed. Med. and Surg. Journ. Vol. VI. p. 326.) it was shown, that the practice of medicine in the navy possesses some very peculiar advantages; and it is now proposed to sketch out a plan for improving these advantages. In submitting this to the consideration of naval surgeons, the writer is solely influenced by a desire to benefit his profession; not considering what he here offers as the best or only method, but as one of easy application to practice, and which, if adopted, would confer on medicine some of the great benefits which, he is convinced, the peculiarity of their situation is capable of yielding. Nor is he without hopes, that the thing, thus lightly touched on, may challenge the attention of some one more able than himself to do it justice; not conceiving it impossible, (while he beholds the greatest improvements and the noblest institutions taking their birth from individual exertion), that the improvement he now proposes may, in process of time, be fully accomplished.

In this plan, all that is required of the naval surgeon is a little industry and observation. I would have him consider the body of men, of which he is the medical superintendant, as the subject of an experiment placed within the influence of all external bodies. I would have him mark the changes which these reciprocally undergo, endeavouring, with unceasing attention, to ascertain the causes of the different changes that arise in this subject of experiment, and to explain the mode of action of which these are the result. When the effects are *disease*, he is to note its whole phenomena, still remarking, in a particular manner, its relation with external bodies, and the effects of these on the subject in this altered condition. In other words, I would have the surgeon to pay particular attention to the whole ship's company, as well in health as in disease, observing and marking their mode of living, as to food, drink, clothing, exercise, &c.; their different conditions and habits, and the effects of these on health and disease; particularly noting the state of

the weather, and endeavouring to ascertain its influence. When disease occurs, he is to pay great attention to every case, so as not merely to benefit his patient as much as possible by the best practice, but to instruct himself from every additional sample of disease.

All this is a matter of the easiest attainment, and may be very well accomplished in the following manner: In a journal, kept for the purpose, the surgeon is to commence, by inserting a list of the ship's company, as divided into the different classes of seamen and marines, subdivided into forecastlemen, topmen, afterguard, &c.; in short, into as many divisions as different occupations may be supposed to give rise to difference in health. After every name (as obtained from particular inspection, observation and inquiry) the man's appearance or temperament, habits, character, nature of employment, years at sea, former condition of life, previous state of health, &c. are to be marked; particular attention being paid to every thing which may be supposed to influence health. †

In another part of the journal, he is daily to note the state of the weather, as ascertained from general observation and from instruments. In addition to the account of the state of the atmosphere, the particular state of things, as shown locally between decks, &c. as with regard to moisture, air, &c. is to be mentioned. Then are to be marked the nature of the duty carried on, and the diet and drink of the ship's company for the day. ‡ When any uncommon, or very particular duty is carried on by a small number, such as wooding, watering, &c. the names of the men employed are to be marked in the daily report, and the particular nature of the duty to which they have been subjected, detailed. Then the sick-list is to be reviewed, and the number and names of the men and diseases admitted and discharged are to be marked. At convenient times, the general character of the prevailing diseases is to be inserted, referring, for a detail of the particular cases, to another journal. *This other journal* is to contain a detail of every case of disease which is entered on the list: not a cursory enumeration of the most prominent symptoms, as caught from the first glance at the patient, but a regular and leisurely account of all the *complaints* of the patient, *the present state* of the *usual criteria* of disease, the medicines *taken*, and their

† It is obvious, that this table will be enlarged in proportion to the length of residence of the surgeon in the ship.

‡ To a person unacquainted with the manners of the navy this will appear a strange proposal; but to those who are in that situation, it will be allowed to be of the easiest attainment.

evident effects: in short, a true and full history of the disease, from which may be learned the actual state of the patient's system, and a probable opinion formed of the effects of the remedies employed. This account is to be taken at stated times (once or twice a-day) and fully given at each time.

The plan now proposed, carried on privately, would doubtless contribute greatly to individual, as well as to general improvement; but it would be far from producing all the great effects to be expected from it, were the perfection of it left to the volition of individuals, or to observations formed from partial reports. To accomplish the end in view, it would be necessary that surgeons should be obliged, by their instructions, to transmit the two journals above mentioned, at stated times, to the Board, or to some person or persons appointed for the purpose. The duty of these would be to collate the immense body of evidence; to condense the general facts; and, in short, to reduce to a manageable volume, the whole of the facts and observations contained in the journals, either drawing from these the general results, or leaving this to the discretion of the reader. This might be published annually, or at any convenient times, and would be drawn up in whatever form might appear most advantageous for purposes of general improvement. The gentlemen, whom the nature of their situation points out as best qualified for this task of arrangement, are the physicians to the different fleets. They being on the spot, where the observations were made, and having probably visited every ship, have on many accounts advantages which none others can possess. * Each physician would collect the reports of his own station; and thus we would have annual reports of the Channel, North Sea, Mediterranean, West India, and East India stations. Reducing the magnitude of the undertaking, we would expect the reports to be more correct; at the same time, we would have a better opportunity of comparing the effects of different climates.

The advantages resulting from a faithful and persevering prosecution of this simple plan, it is evident would be great. Let us suppose that a suite of remarks and observations on the above plan was carried on for a few years—say ten only,—by 700 surgeons, in vessels of every class, in all variety of circumstances, in every climate of the globe; that these remarks and observations were compared and collated by some person capable of the under-

* On the other hand, perhaps the nature of their situation on shipboard, and their public duty, might render it impracticable for the physicians. However, this could easily be settled.

taking, in the manner it has been proposed.—Need I waste time in stating, what must appear at first view to every one, the valuable acquisition such a work would be to medicine in general, and to nautical medicine in particular? But leaving such bounded views, when we consider the effects of this plan, faithfully pursued for centuries, amended by the progressive increase of improvement, and enriched by the discoveries of so many years, —we are surprised at the immense views of improvement that open on us, and cannot help regretting the inactivity of man, and blaming the indolence and carelessness of our predecessors, who have left a work of such mighty import for the *speculation only* of the present day.

To many surgeons,* I know, some parts of the plan proposed, will appear visionary and impracticable. To them, I can only answer, that, in drawing it out, I have been guided by personal experience of its practicability; and I have no doubt, that any surgeon of an active disposition, and who has the improvement of his profession at heart, however novel it may appear at first sight, upon consideration will give full assent to its easy application to practice. Simple as it is, however, it cannot be followed without the interference of public authority; the Medical Board alone can procure its adoption. And thrice happy should we be, if any hint here given, should induce any one, who has the power to remedy, to take the subject into consideration. The proposed plan is one which bears the stamp of evident and unequivocal utility;—one which, while it would be of the utmost

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* Particularly to those true sons of indolence, who, "sitting in silence with dejected eyes incurious, and with folded hands," near the rudder head, or in the cock-pit cabin, waste their days in most stoical immobility. The cabin of these gentlemen was, long ago, most faithfully and most admirably depicted by Ovid, in the following lines:—

Est——longo spelunca recessu
Ignavi domus;
Quo nunquam radiis oriens, mediusve, cadensve
Phœbus adire potest. Nebulæ caligine mistæ
Exhalantur humo; dubiæque crepuscula lucis.
Non vigil ales ibi cristati cantibus oris
Evocat Auroram; nec voce silentia rumpunt
Sollicitive canes, canibusve sagacior anser.
Non fera, non pecudes, non moti flamine rami,
Sonum reddunt.
——Cum murmure labens
Invitat somnos unda.

Metamorph. Lib. XI. l. 592.

advantage to our country, would cost her nothing to put into execution; and which, while it must sooth the breast of the man who procured its adoption, as the performance of a great virtue, would ensure him an endless fame in the remembrance of a grateful posterity.

T. F.

VIII.

Account of two Cases of Gonorrhœa, attended with unusually severe symptoms, relieved by the Employment of Calomel and Opium in combination. By GEORGE LANGSTAFF, Member of the Royal College of Surgeons, London.

DURING the early stage of gonorrhœa virulenta, the symptoms are generally pretty regular, consisting of occasional twinging pain, ardor urinæ, discharge from the urethra, and frequently chordee; but their degree of violence, influenced, perhaps, by the nature of the infection, depends chiefly on idiosyncracy, and is often increased by intemperance. However, we occasionally meet with great deviations from the regular order in this, as well as in other diseases, of which the following case is a remarkable instance.

Mr JOHN HART, 39 years of age, of a plethoric habit, applied to me on the 10th of June, with gonorrhœa, which had made its appearance nearly a week. The glans penis, and orifice of the urethra, were much swollen, and he complained of violent heat and pain in making water. The discharge from the urethra was copious, of a yellowish colour, tinged with green.

He was directed to keep a cloth to the penis, damped with cold water, as often as he conveniently could; opening medicine was given, and the following powder prescribed:

℞ Pulv. tragacanthæ comp. ʒss.
Nitratis potassæ gr. iij.
Jalapæ gr. iv. m. f. pulvis.

Ter die sumendus, in poculo aq. hordei comp.

This method of moderating the ordinary inflammatory symptoms, aided by the antiphlogistic regimen (with local and general bleeding where the case requires), I have mostly found successful; and when the ardor urinæ is troublesome, I commonly order

from ten to twenty drops of liquor potassæ to be taken with each powder, until the pain moderates.

But this remedy is rather uncertain in its effects; for though it sometimes allays the above-mentioned symptom, in the most surprising and satisfactory manner, in other cases it does not afford the least alleviation, either in increased or diminished doses.

The inflammatory symptoms continued violent, and the ardor urinæ very troublesome, till the 17th of the same month, when the swelling, inflammation, and heat, had lessened considerably. The discharge was still profuse, and of a purulent colour.

The powders were continued, but the liquor potassæ was omitted, as the pain, in evacuating the urine, had so much diminished; but as he complained of slight erection of the penis in the night, attended with pain, a pill, with one grain of opium, and two of camphor, was directed to be taken every night, and the penis to be bathed in warm water.

Under this mode of treatment, the symptoms gradually decreased, and there was every reason to suppose the disease would run its course in a favourable way; but on the *thirtieth*, the inflammatory symptoms recurred with redoubled violence, without any assignable cause, and the patient was troubled with frequent painful erections of the penis. The warm bath was used, a pint of blood taken from the arm, (which after standing a while proved sizey, or what is termed inflamed), and saline purgatives, with demulcent beverage, were prescribed.

On the 2d of July the patient called on me, nearly distracted with pain; he had not voided his urine for twelve hours, and had, during the last two, suffered the greatest agony from the urgent inclination to do so. In addition to his misery, the penis had been distended with blood to an enormous size nearly six hours, and he had not been able to moderate the erection by cold, or any other means he had tried; the discharge was much diminished.

Cold and warm water having been used without effect, it was necessary to adopt some effectual mode of relief. I thought the introduction of the catheter would be the most likely method of lessening the irritable state of the bladder.

I employed a moderate sized silver instrument, which passed easily, with its convexity towards the arch of the pubis; but when I had turned the handle, and attempted to carry the point into the bladder, though it was done in the most cautious manner, violent spasm affected the parts, and obliged me to withdraw the catheter: when, to my astonishment, nearly half a pint of arterial blood flowed in a moderate stream from the urethra.

A discharge of blood from the urethra is not an unfrequent occurrence, when the inflammatory symptoms of gonorrhœa run

high; and it generally gives temporary ease, as it did in this case. But as the bleeding still continued, I introduced a common bougie, which plan I have often seen succeed in suppressing hæmorrhage, brought on by the use of the caustic. I had also in view the further motive of promoting the evacuation of the bladder; which very fortunately succeeded; for as soon as the bougie was withdrawn, the urine flowed to the quantity of a pint; the penis became flaccid, the hæmorrhage ceased, and the patient was freed from pain.

After this relief, the patient was ordered to take a pill, with two grains of calomel and one of opium; to sit over the steam of warm water, and to foment the parts frequently; low diet was also enjoined, with a view of lessening the inflammation and irritation of the urethra, and (I may add) bladder; for if we may be allowed to judge from the nature and violence of the symptoms, the whole mucous lining of both was affected.

Mr Hunter says,* "The ureters, and even the kidneys, sometimes sympathize, when the bladder is either very much inflamed, or under a considerable degree of irritation: however, this but rerely happens, and if it should take place with any degree of violence, I should suppose that the stomach would also become affected, and of course the whole constitution."

The same author further adds: "When the inflammation, or perhaps only the irritation, runs along the whole surface of the urethra, attacks the bladder, and even extends to the ureters and the kidneys, so as to cause a disagreeable sensation in all these parts, the disease is generally very violent, and, I suspect, is something of the erysipelatous kind; at least, it shows an irritable sympathizing habit."

July 3d.—About seven o'clock this morning, the distension of the penis was as great as yesterday, attended with retention of urine, and violent efforts to void it; the painful sensations were so distressing, as to compel him to send for me about ten o'clock.

A bougie was introduced, and upwards of a pint of offensive urine, loaded with mucus, came off, attended with the same pleasant relief as yesterday.

Leeches were applied along the course of the urethra, and to the perinæum, which caused a copious flow of blood; and the warm bath, and the following mixture and pills were ordered:

℞. Pulv. acaciæ ʒss.
Pulv. ipecacuanhæ comp. ϑij.
Sqr. althææ ʒss.
Aquæ menthæ virid. ʒvij. m.
Sumat quartam partem quarta quaque horâ.

* First Edition, p. 43.

℞ Extracti opii purif. gr. ij. f. pilula horâ somni sumenda.

About seven o'clock in the evening, the symptoms again returned, and were so tormenting, as to oblige me to use a bougie, when about half a pint of the same kind of urine flowed immediately.

July 4th.—The erection not so teazing last night, but the priapism and retention of urine this day so urgent, as to require the aid of the bougie. Leeches were again applied to the perinæum and urethra, and the mixture and anodyne * pill were ordered to be continued.

July 5th.—The penis had been erect, without the smallest incurvation, all last night, and was this morning swollen to an enormous size; the glans looked as if on the point of bursting; the integuments of the penis and scrotum were much discoloured, with erysipelatous inflammation; and the urgency to expel the urine was so great, and attended with such acute pain in the hypogastric region and penis, that I really thought the man would be deprived of his senses, or that he would commit suicide.

The abdominal muscles seemed to sympathize with the propelling action of the bladder, even contrary to the will of the patient, and tended materially to increase his sufferings; and from the frequent expulsatory efforts, with the pain and weakness he complained of in the situation of the abdominal rings, (where there were evident protuberances), I was apprehensive herniæ would be produced, and therefore took necessary steps to prevent, if possible, such a calamitous event.

I endeavoured to make him sensible of the abdominal muscles being partly voluntary agents, that he might endeavour to prevent their violent synchronous action with the bladder; but this he could not now do, as they had become sympathetically involuntary.

By means of cold applications, and pressure with my hands, I attempted to repel the blood from the penis, in order to introduce a bougie, whilst it was in a state of flaccidity; this, however, could not be achieved, owing to the extreme pain the pressure produced. I was therefore under the necessity of using it during the erected state, and though not more than half a pint of urine was evacuated, the pain and erection immediately ceased.

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* Extractum conii, and extractum hyoscyami were tried without effect; also opiate clysters.

After withdrawing the bougie, the same quantity of urine was made, under similar circumstances, in the evening. The mixture and pill were ordered to be continued, as yesterday, and he was requested to apply cold water to the perinæum and penis, as often as conveniency would permit.

July 6th.—Though the symptoms were not so violent as yesterday, yet he could not evacuate the contents of his bladder, without the assistance of a bougie, which was used twice this day; when not more than twelve ounces of urine flowed each time.

July 7th.—During last night the patient experienced agonizing pain, owing to the violence of the erection, accompanied with urgency to make water. These symptoms were this morning again relieved, by the introduction of a bougie. As his bowels were rather costive, probably from the opium, a mixture, with sulphas magnesiæ cum infus. sennæ was prescribed, and the following pills.

℞ Submuriatis hydrargyri,
Pulv. opii purif. ana gr. xij.
Conf. quod satis ft. pilulæ vj.
Sum. j. nocte maneque.

This evening, about half an hour after taking the first pill, he was, to use his own expression, happily surprised, by making, with perfect ease, upwards of a pint of urine, of a very turbid colour. He slept comfortably all the night, and repeated the pill in the morning of the 8th, with the same good effect as yesterday.

The patient seemed confident the pleasant change in the nature of his complaint was ascribable to the pills. I must, however, confess, that I did not believe it likely they would produce so sudden a relief; and was more induced to suppose, that the turbulent symptoms had run their course, and were beginning to moderate.

As opium without calomel did not allay the violence of the symptoms, I was induced to join the latter, with a view of counteracting the effect of it on the bowels; and having given similar pills, with the most decided advantage in those unpleasant symptoms which occasionally come on about the latter part of the inflammatory stage of gonorrhœa virulenta, viz. irritation of the neck of the bladder, attended with constant inclination to evacuate the urine, violent pain in discharging the last drops, (owing to the spasmodic action of the musculi acceleratores urinæ), sense of weight about the perinæum and anus, tenesmus, &c. &c. I was determined to give them a fair trial in the present case; and I feel a pleasure in stating, that they exceeded my expectation, as

he continued to take them until the 14th of July, without any return of the former symptoms.

As the evacuation of urine was now performed with ease, the erection and the inflammation of the external part of the penis had ceased, and no symptom remained, except discharge from the urethra, which was inconsiderable, I thought it advisable to discontinue the pills, lest the calomel should affect his mouth; he, however, reluctantly assented to this, being apprehensive of a recurrence of his former sufferings.

On the fifteenth, scarcely twenty hours from the time he discontinued the pills, the priapism, with retention of urine, recurred as violent as ever, and gave me an opportunity of trying whether the calomel and opium had produced all the good effect which followed the first exhibition.

In the Philosophical Transactions for the year 1776, Vol. LXVI. p. 578, Dr Hamilton, of King's Lynn, Norfolk, has related the specific effect of calomel and opium in suppression of urine from strictures. His remarks are inserted in Mr John Hunter's valuable work on the venereal disease, Chap. X., which I shall take the liberty of quoting.

"Dr Hamilton, after relating a case of total suppression of urine, arising from stricture, where no instrument could be passed by the natural passage, and where a puncture was made into the bladder from the rectum with success, further remarks, that in those cases of suppression of urine, in general, he has found calomel and opium in large doses, answer better than any thing he has tried.

"He is convinced, from repeated trials, that the specific efficacy is in the calomel, as large doses of opium alone have proved ineffectual, but he does not say that calomel alone will answer.

"He orders ten grains of calomel, with two of opium, to be repeated in six hours, if it has not answered in that time; and he says, he has seldom been obliged to give a third dose."

From the sudden effect produced by calomel and opium, I should be induced to suppose the cases, in which Dr Hamilton was so successful, were retention of urine from spasmodic strictures in the urethra, as I cannot imagine it possible for permanent strictures to be so speedily relieved. †

The tinctura ferri muriati in retention of urine from spasmodic strictures, frequently answers our most sanguine expectation; but I did not think the present case a proper one to try it in.

† Permanent strictures may be aggravated by the supervention of spasm or inflammatory irritation; and these may receive signal relief by the treatment he describes.

Blisters to the perinæum and sacrum, I have frequently applied in irritation of the bladder, but never with any good effect.

But to return to the treatment of the case. I was determined not to use the bougie (though I was almost certain, from the former good effects, it would have produced a temporary relief of the symptoms) until I had tried the effect of the pills fully.

Two grains of calomel, with the same quantity of opium, were given, and ordered to be repeated every hour for three hours, unless the desired effect was produced sooner. In the course of two hours and a half, he voided, by his own efforts, about 14 ounces of turbid offensive urine: the turgidity of the penis and its superficial vessels soon abated, and the patient was once more relieved.

The pills were continued night and morning, from this time (July 16th), until the 30th of the same month, without the patient suffering the slightest return of any of the symptoms the pills were intended to prevent; and as his gums were affected by the submuriate of mercury, and the gonorrhœal symptoms had all vanished, it was thought advisable to discontinue them.

August 16th.—The patient called to inform me he remained well, but could not leave off the double truss, owing to the weakness the abdominal muscles had sustained from the violent efforts made to void his urine: at the time he suffered from repeated retention of it.

On examining the abdominal rings, they were found more than usually open, and there was a disposition to hernia in each side, to prevent which the truss was ordered to be worn.

I am happy to have it in my power to confirm my opinion of the treatment which proved so successful in the preceding case, by the justly respected authority of Dr James Curry; to whom I am much obliged for the ready communication of the following case.

"In 1804, I was consulted by Mr Robert Pugh of Grace-Church Street, who was then my pupil, respecting a young man, a sailor, whom he had under his care for gonorrhœa. I understood (for I did not see the patient) that the ordinary symptoms were unusually violent, and so far from yielding to the usual antiphlogistic plan, had considerably increased. But besides these, he had been attacked with fits of chordee, accompanied by such excruciating pain, as nearly to deprive him of reason during their continuance,

"These paroxysms having repeatedly come on in the evening, pretty nearly about the same hour, for several successive

times, induced Mr Pugh to employ the Peruvian bark, in considerable doses, but without any relief.

"Things were in this state when my opinion was asked; and after learning what had been done, I advised that two hours before the time of the evening paroxysm, two grains of opium, and four or five of calomel, should be given; that the bowels should be opened next morning by castor oil, or cathartic extract; and afterwards the chinchona, combined with soda or potass should be continued through the day; the calomel and opium to be given again every evening, in the same manner, as long as they might appear necessary.

"A few days after this (I think the interval was between Friday and Tuesday), I was gratified by hearing, that the very first night the patient was astonishingly relieved, and in three days completely freed from every distressing symptom. I am sure Mr R. Pugh will readily communicate a fuller and more satisfactory account of the case, which now becomes additionally valuable, as conferring and illustrating that which you have so successfully treated, and tending to establish a principle, against which the profession cannot much longer continue to shut their eyes."

IX.

Remarks on Sore Nipples. By a Correspondent.

AMONG the various causes of suffering to child-bearing women, the misery of suckling with sore breasts is very generally complained of and dreaded; and this at a time when so effectual a remedy has been discovered, that it argues something like ignorance or obstinacy in a medical attendant, who can allow a patient to continue long afflicted with so painful a disorder.

It is difficult to conceive why many practitioners, (especially in provincial towns), who are strenuous advocates for all mothers nursing their own children, can in so many instances see them relinquish the office, when the infant is but a few weeks old, on account of the excruciating pain arising from sore nipples. Did they but constantly have recourse to the false nipple, now so generally used in London, and so easily procured in every part of the country, almost every case of mere excoriation might be cured in two or three days, and very many instances of abscess in the

breasts would be prevented, by assisting the child to draw off the milk, which in a few hours will harden, if neglected, and occasion inflammation. The shield and teat is so well known in and about London, (where it is constantly used at the Lying-in Hospital), that I would particularly address myself to country practitioners, in order to persuade them to adopt this simple and easy method of averting one of the most torturing complaints a woman is liable to. In every instance where I have known the shield tried, it has been introduced by some sympathizing female friend, and not by the medical attendant; and yet I never heard any of the faculty raise any valid objection to the use of it. It is recommended by Dr Clarke and by Dr Hamilton, the latter of whom only seems to doubt whether all children can suck through it. I would by no means assert that *all* children can employ force enough to create a vacuum in the shield without some little difficulty, nor can all children succeed in drawing the breast; but it is remarkable, that there are instances (some of which are well known to me) of puny children who could suck with the shield when they could not without it, probably from the mother's nipple being so small and so short, as not to be retained in the infant's mouth without an effort. In this case the child will *quarrel* with the breast, as the nurses call it, till the exhausted mother is rendered feverish, and the little power of suction which the child had at first, is quite spent in fruitless endeavours and in crying. Whenever the child has any difficulty, or the mother any pain, relief may be had by applying the shield: why then is it so common a case to hear of the long-protracted sufferings of a mother who perseveres in nursing, or the premature weaning of a child in the case of a less courageous parent?

I shall subjoin a description of the instrument, with some directions for preparing and preserving the teats. The silver shield is to be had (price 12s.) at Savigny's. I have also seen ivory ones neatly turned upon the same model, which answered extremely well; these might be made by any ingenious workman. † The skin is the teat of a fresh slain heifer; it should be white and delicate, or the child may reject it; the inside must be carefully scooped out, so as to leave the teat about the thickness of Morocco leather. If the operator should unfortunately make the smallest puncture in the sides of the skin, of course it would not act, and must be thrown away. After being well washed in cold water, the teats must be kept in spirits, till an hour or two before using, when they must again be laid into cold water, to

† The instrument called *Mrs Relfe's suckling-assistant*, often fails because the ivory shield is *not* turned after the model of the silver one.

take away all taste of spirits; the teat must then be wiped dry, and sewn closely and firmly at the edge to the row of holes made in the shield, after which it need not be unsewn, till it is become bad from use, and must be exchanged for a fresh one. But in the mean time, great attention must be paid to wash the whole thoroughly after suckling, and to keep it constantly in cold water; or if the weather be hot, in spirits and water, rinsing it well in the latter case, before using. The teat should project somewhat longer than the silver shield, or it will not yield to the child's mouth.—I am yours, &c. NUTRIX.

Tavistock, Devon, November 5th, 1810.

X.

An Additional Account of the Lithontriptic Power of the Muriatic Acid, with the Analysis of the Calculous Matter discharged, in one case, during its use; also an Account of the Lithontriptic power of the Nitrous Acid, with the Analysis of the Calculous Matter discharged in a case during its employment. By PETER COPLAND, Surgeon, Little Bytham.

> Per varios casus artem experientia fecit,
> Exemplo monstrante viam. MANILIUS.

THE instance which drew my attention to the lithontriptic power of the muriatic acid, with the first four cases in which it was successfully employed, is recorded in the fifth volume of the Memoirs of the Medical Society of London; and, in the succeeding volume of the same publication, a summary of seventeen additional cases is inserted. The subject, apparently, having yet attracted little notice, the author has much satisfaction in offering the following additional evidence, of the possibility of dissolving calculous concretions in the urinary organs, to the consideration of medical practitioners.

June 14th, 1799.—RICHARD GOFORTH, of Swayfield, aged twenty-five, was attacked, a few days preceding, with a severe pain in the region of the bladder, and a constant desire to make water, which was voided in small quantities, with much pain. He

was likewise harassed with a frequent urging to go to stool. These symptoms had succeeded a pain in the loins, of long standing.

Thirty drops of the muriatic acid were taken in water, three times a day, and he was directed to collect daily, in one vessel, all the urine which could be obtained in twenty-four hours. The clear urine was then poured off, and the sediment collected upon a paper filter. The acid was gradually increased to fifty drops, and continued till two ounces were taken, when the complaint was removed. One hundred and four grains of a buff-coloured sediment, in an impalpable powder, were collected from the filter.

Analysis.—To one hundred grains of this sediment, a solution of pure potass, in distilled water, was gradually added, and the vessel shaken till the solution was completed, and it had an alkaline taste. On applying a gentle heat, a strong smell of ammonia was perceived. The filtered solution was precipitated with muriatic acid; and the precipitate, when washed and dried, was of a yellowish colour, and dissolved in nitric acid, with the production of red fumes, and the evolution of caloric. A few drops of this solution, evaporated from glass, left a pink residuum, evincing the precipitate from potass to be uric acid.

The residuum after potass was added to dilute acetic acid, which produced a slow effervescence. The filtered solution, with carbonate of potass, gave a white precipitate, which, when saturated with sulphuric acid, was insoluble in sixty times its weight of water, assisted by heat, proving the substance dissolved in dilute acetic acid, to be carbonate of lime.

With the residuum after dilute acetic acid, muriatic acid produced no effervescence; but on adding a solution of pure ammonia to part of the filtered acid, a white precipitation took place, and the other part, on the addition of sulphuric acid, gave also a white precipitate, indicating the substance soluble in muriatic acid to be phosphate of lime.

General Result.

	Grains.
Uric acid, - - -	72
Ammonia, - - -	18
Carbonate of lime, - -	3
Phosphate of lime, - -	5
Loss, - - - -	2
	100

The loss consisted of woollen fibres, which, in the collecting, had fallen into the vessel containing the urine, and had subsided with the calculous matter.

The subject of the above case having lived about eleven years after, without any return of the disease, was frequently referred to, for the satisfaction of others labouring under the same complaint; and, in every case that afterwards occurred, till the 8th of June 1804, the muriatic acid gave equal satisfaction.

At that date, a man, upwards of seventy years old, who for many years had been distressed with the symptoms of lithiasis, had taken five ounces of the muriatic acid without any relief. Happening, at length, to void a small stone, which exhibited no appearance of decomposition, it was placed in sulphuric acid. This acid acted feebly upon it; but on placing it, after washing, in nitrous acid, a rapid solution took place.

Forty drops of the diluted nitrous acid, of the pharmacopœia of that time, were, therefore, taken in water four times a day. Soon after this, a discharge of a light brown powder took place with his urine, giving such relief, as to induce him to continue the medicine occasionally, until the 7th of June 1805, during which time he took two pints of the diluted acid. As he lived at a distance, I heard no more of him till his death, which happened a considerable time afterwards.

Nov. 12th, 1805.—I was sent for to Simon Kelly, of Colsterworth, aged twenty-nine. He informed me that, from the age of nine years, he had been troubled occasionally with a pain in his loins, which, after strong exercise, was sometimes accompanied with bloody urine, and a difficulty in making water. At this time, he complained of a dull pain, with a sense of weight in the region of the bladder, and a constant desire to make water, which was voided in small quantities, with great pain.

Forty drops of the diluted nitrous acid were directed to be taken in water every two hours, till a sediment appeared in his urine, and afterwards continued four times a-day, while necessary. A sediment soon appeared, and by persevering with the medicine to the 20th of April 1806, six hundred grains of a light brick-coloured powder were collected; in which, towards the conclusion, a few fragments of calculus were found partially decomposed. Twenty-seven ounces of the diluted acid were used. He has had a return of the complaint; but on taking the acid again, a sediment appeared in his urine, with some small fragments, which relieved him as before. One hundred grains of the sediment, collected from this person, and submitted to the analysis described, gave the following result.

	Grains.
Uric acid, - - -	80
Ammonia, - - -	11
Carbonate of lime, - -	2
Phosphate of lime, - -	1
Loss, as before, - -	6
	100

Since the discovery of the superior lithontriptic power of the nitrous acid, it has been employed in several cases of lithiasis; and in no instance hath it failed to procure a discharge of sediment with the urine; and, where it hath been duly persevered in, a consequent removal of the symptoms. It is necessary to add here, what would have been tiresome repetition in the cases, that, in every instance where pain required it, a sufficient quantity of opium was given, and repeated as often as it was necessary; and that costiveness was prevented by mild laxatives. The oppression of the stomach, which sometimes occurred from the frequent doses of the acid, was relieved by taking any convenient spirit, properly diluted with water. To prevent the teeth from being affected by the acid, the doses were mostly sucked through a large goose-quill, and the mouth was immediately rinsed with water.

Little-Bytham, near Stamford,
Lincolnshire, Nov. 22d, 1810.

XI.

An Account of the Larvæ of two Species of Insects discharged from the Human Body. By T. Bateman, M. D. F. L. S. &c. (*with an Engraving*).

The cases which I have to relate, do not possess any practical importance; and the only degree of interest, that may be attached to them, must be derived from the uncertainty of medical records on the subject in question. This uncertainty induces me to bring them forward. For whether we consider, on the one hand, the difficulty of accounting for the origin of many of those animals, which make their *nidus* in the human body; or the variety of indistinct and fabulous histories of such animals, which

have been detailed on the other; every instance of the existence of those which are not usually found there, but the species of which can be ascertained, and therefore, the probable origin pointed out, seems to be worthy of being recorded.

Besides the varieties of the tænia, the lumbricus, and the ascaris, which are the most common inhabitants of the alimentary canal in man, a considerable number of living creatures, most frequently those belonging to the tribe of insects, have been described by medical writers, as occasionally making their abode in different parts of the human body. The writers of the sixteenth and early part of the seventeenth centuries, indeed, have related instances of the discharge of various animals, as well as insects, from the body; such as frogs, lizards, serpents, &c. which may be found on consulting the collections of Schenkius, Marcellus Donatus, Borelli, and others; and the microscopic philosophers not only peopled every organ of the body, even the blood-vessels themselves, with worms and animalcula, * but believed that all contagion consisted of the same beings, which, according to the varieties of their nature, communicated scabies, and syphilis, small-pox, dysentery, the plague, and every infectious distemper. † But even after the experiments of Redi had elucidated the physiology of the insect tribes, and the observations of Vallisneri, and others, had proved the fallacy and absurdity of many of the tales, just alluded to, a sufficient degree of ignorance or inattention still prevailed among medical observers, to leave us in the dark, respecting the nature and origin of most of the living beings, generated or nurtured in the body; so that every production of this kind is still considered as a sort of anomaly; and the various facts remain too indefinite, or too imperfectly discriminated, to admit of any practical arrangement. There is reason to believe, however, that the species of insects, about to be described, are not very uncommon parasites of the human frame.

For an account of the first species, I am indebted to my friend Mr Oswald Allan, of York, who favoured me with a specimen, and with his notes of the first case, which I shall mention. The symptoms of these cases, however, are not so much the object of this paper, as the appearance of the insects; especially as a considerable degree of irritation and pain seems to have been common to them all, and as it is impossible to ascertain how much of the distress was attributable to the presence of the insects, and how much to other sources, where other disease existed.

* See the learned dissertations of Dan. Le Clerc, entitled Hist. Lator. Lumbric. p. 274, *et seq.*

† See Amœnit. Academ. Vol. V. Diss. 82.

The first case was that of a young woman, aged 24, of an emaciated frame, and sallow complexion, who had been sickly from the ninth year of her age, and had especially suffered several attacks of acute rheumatism. For three months, she had been affected with severe griping pains in the abdomen, attacking her suddenly about the umbilicus, which were accompanied with sickness, and were generally relieved by an evacuation by stool, sometimes by a discharge of flatus from the stomach. These pains were usually worse in the night, and were much aggravated by the impulse of cold air on any part of the body, and by moving herself in bed. After an extraordinary attack of the pain in the belly, she passed by the anus a worm or grub, after which the pain was immediately relieved, and she continued easy during the remainder of the day. The pains, however, returned as usual; and after the lapse of a month, she quitted another worm of the same form *per anum*, suffering the same exacerbation and speedy relief of the abdominal pain. A considerable time after this occurrence, the patient died in a very emaciated condition.

Description of the Insects.

These insects were preserved alive by Mr Allen, in a phial containing only air, the one living about a month, the other upwards of a fortnight. They possessed extreme agility, especially in the evening, and moved as quickly in a retrograde as in the contrary direction. They were about $1\frac{1}{4}$ inch in length, (see Fig. 1.) and equal to a large crow quill in circumference: the body being divided into thirteen sections, the third of which from the head was smaller than the rest. The head contained two eyes, and two short antennæ or palpi; and they had six feet attached to the three first sections of the body. In a word, they were obviously the grub or caterpillar of a winged insect, and that of the *coleopterous* order: and I have the authority of that able naturalist, Dr Shaw, for considering them as the *larvæ* of the common black beetle, the *Tenebrio molitor* of Linnæus. * This *larva*, it may be observed, is well known by the appellation of the *meal-worm*, and was so denominated in the time of Mouffet, † who

* Systema Naturæ, Class, Coleoptera.

† Insectorum Theatrum, Lond. 1634. Lib. II. Cap. 20. p. 254. "Farinarios Angli *meale-wormes* appellant, teredini similes, sepedes, capite parvo et spadiceo, corpore annuloso, et pro farinæ diversitate vario colore; proba enim et albissima farina, albos generat; vetustior flaves; macra et furfuribus immixta etiam fuscos."—Linnæus observes, that this *larva* is the favourite food of caged nightingales.

has given a rude figure of it. It has this name from living principally in meal or flour, which constituting one of our principal articles of food, under various modes of preparation, it is easy to account for the conveyance of the insect into the alimentary canal, either in the state of *ovum*, or soon after it was hatched.

It is probable that this species of *larva* is not one of the most rare of the insects which occasionally infest the human body. Another specimen of the same *larva* was voided by a patient of the same gentleman, about three years after he had seen the first. This was said to have been discharged from the nose. It is obviously of the same species with the other, which is represented in the drawing, and several apparent examples of it are on record. Forestus affirms, that he witnessed the rejection of two *scarabæi* from the stomach of a girl, one at the interval of two days from the other; and the same patient likewise vomited a living worm or *eruca*, which was probably a larva of the same insect. * He also mentions the ejection of a species of caterpillar, "vermem erucæ similem," by vomiting, which was communicated to him by a physician; after this vomiting, a severe pain of the stomach, of long standing, was completely removed. Tulpius has figured an *eruca*, which accords with the specimen here delivered, two of which, he says, were passed from the bladder by a woman of fifty years of age, † and a similar one from the nose of another, who had previously suffered severe headach. ‡

It may be here remarked, that the presence of insects, in the state of larvæ, in the nose and the adjoining sinuses, is not a very uncommon occurrence. The ova are introduced into these parts either by the parent insect, or by the act of inhaling certain odorous matters, with which they may be mixed. For several species of the *œstrus*, or bott, the nostrils of sheep and other animals appear to be the situations in which nature ordained them to be nurtured: and, that insects of this species sometimes find a nidus in the nasal passages of the human subject, is proved by a case related by Dr Heysham, of Carlisle, in which three botts were discharged from the *antrum* of Highmore, after that cavity had been perforated by a trocar. § In tropical climates, as we learn

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* Vidimus et nos puellam Briellensem anno 1568, duos scarabæos vomitu rejecisse, uno per duos dies superveniente; sed et animalculum vivum rejecit, instar vermis parvi, longitudine dimidii digiti, in capite duo cornua habens, ad rufedinem tendens." Foresti Opera, Lib. xxi, Obs. 25. *Schol.*

† Tulpii Observ. Med. Lib. II. Cap. 51. Tab. vii. fig. 3.

‡ Loc. citat. Lib. IV. Cap. 12.

§ Medical Communications, Vol. I. Art. xxx. These larvæ are figured in

from Dr Lempriere, the maggots or *larvæ* of the large blue fly, which are constantly buzzing about the sick, are generated in the nose, mouth, and gums, in the last stages of fever, when the patients sleep or dose with their mouths open, the nurses finding great difficulty in preventing the deposition of the *ova* in those parts. He mentions one instance in the lady of an officer, who had escaped from the attack of fever, but in whom "these maggots were produced, which burrowed and found their way by the nose through the *os cribriforme*, into the cavity of the cranium, and afterwards into the brain itself, to which she owed her death." * That the *ova*, thus deposited, or the *larvæ* when hatched, should be occasionally swallowed, and be nurtured in the stomach or bowels, is a probability which we should readily anticipate.

The second species of insect, of which I am in possession of three specimens from two different sources, appears to be a more frequent inhabitant of the human body than the meal-worm. The first which I received, was rejected from the stomach of a labouring man, at Norwich, and was sent to me by my friend Dr Reeve of that city. He informed me, that the patient had suffered considerable pain in the stomach for some time, when he suddenly brought up a number of these *larvæ* by a slight vomiting, accompanied with a tickling in the throat, and a little cough, after which he was greatly relieved. They were alive and moving for sometime after they were discharged. These *larvæ* (see plate, fig. 2.) are from three to upwards of four lines in length; somewhat spindle-shaped, but tapering more towards the head than at the other extremity; and of a yellowish white colour. To the naked eye, they appear to be beset with short feet along each side: but, when magnified, (see fig. 3.) these projections are found to be branched or feathered, and are the *bronchiæ* which belong to aquatic larvæ. The head is furnished with eyes and *antennæ*.

At the first view, the analogy of the bott, or *larva* of the *œstrus*, whose nidus is the nostrils, stomach, *rectum*, &c. of the horse and other quadrupeds, suggested the notion that these might be examples of the *œstris hominis*, the existence of which is questioned by Mr Bracy Clarke. † A more accurate examination,

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Plate I. fig. 2 and 3, in the same volume. An intolerable hemicrania was occasion by their presence, and ultimately proved fatal.

* Lempriere, Observations on the Diseases of the Army in Jamaica, Vol. II. p. 182.

† See an excellent paper on the subject of *botts* by this author, in the Linnean Transactions, Vol. III. where the different species are delineated:—see also Dr Rees's Cyclopædia, Art. *Bott.*

however, corrected that notion; they proved the larvæ of the fly (*musca*). In the opinion of the excellent naturalist, already mentioned, they are the larvæ of that variety of the *common house fly*, which is denominated *musca domestica minor* by the Swedish entomologist, De Geer, who has figured both the larvæ and the fly; * and the smaller *bog-house fly* of Swammerdam, who hath likewise given figures of both.† The larvæ of this variety of the fly inhabit moist and wet places, or live altogether in water: their introduction into the human body may, therefore, be easily explained.

The other specimens of the same larva were taken from a phial, containing about a dozen, which I received through the favour of Dr Babington. These were found intermixed with the alvine discharge of a patient, under the care of Mr Norris, surgeon to the Charter-house, and were believed by the patient to have been evacuated from his bowels: Mr Norris, however, is doubtful, whether they may not have been generated in the water-closet used by the patient. This suggestion is far from being improbable. Vallisneri long ago pointed out two sources of mistake, from which many of the alleged instances of the discharge of insects and other living creatures from the bladder and intestines might have had their origin; namely, these insects, &c. might have fallen or crept into the utensils, and thus be afterwards found in the urine or feces; and 2dly, inanimate matters, bearing some resemblance to worms, such as polypi of the heart, &c. may have been supposed to be animals.‡ This point is farther confirmed by a circumstance, related to me by my much respected colleague, Mr John Pearson. A lady was in great alarm, from the belief that she frequently passed by stool several little red worms, which were extremely lively in their motions. Upon accurate examination, however, his suggestion, that these worms were inhabitants of the water-closet, was confirmed; for they proved to be the larvæ of the *common gnat*, which are aquatic, and to be pre-existing in the water.

The records of medicine, however, afford us reason to believe, that the larvæ of some of the varieties of the common fly are not unfrequently inmates of the human body, unless the mistakes, just alluded to, are supposed to have been committed very generally. Ruysch§ has described and delineated both the larvæ,

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* Histoire des Insectes, Tom. V. Tab. ii. fig. 4.

† Bibl. Naturæ, Tab. xxxviii, Fig. 3.-6.

‡ Vallisneri dell' Origine di Vermi, p. 56.—Also Le Clerc, loc. cit. p. 274.

§ Thesaur. Anatom. I. p. 54.

and the flies which originated from them, after they were discharged by urine by a nobleman in considerable numbers. Tulpius * has mentioned a similar case, and has figured the larvæ, which closely resemble those in my possession. It must be acknowledged, however, that the bladder is the least probable *nidus* for the larvæ of winged insects; although the occasional occurrence of some species of vermes in that viscus is established, I apprehend, without referring to the marvellous collections of Johannes Schenkius. An instance of a long worm, which became entangled in the openings of a catheter, and was thus drawn from the bladder, was lately mentioned to me by a most accurate observer, Mr Lawrence.

Several examples of the larvæ of the fly being discharged from the alimentary canal are on record. Dr Wahlbom, of Upsal, has related the case of a girl, who, after suffering considerable pain in the stomach and left side, discharged by stool a number of larvæ on several successive days, after which she was relieved from the complaint. One of these larvæ, while it was kept in a phial, was converted into a fly, which proved to be the *musca nigra* of Linnæus. † (Faun. Suec. 1105.) Dr Wahlbom also states, that "a few years ago there was a girl in Upsal, from whom a large quantity of worms were brought away, and these were *fly-worms*. N. Fauna Suec. 1064; for an account of which he refers to Dr Du Bois's Treatise de Tænia.

I forbear to quote a number of instances, which stand upon the very questionable authority of Borelli, Marcellus Donatus, Hercules Saxonia, Schenck, and others, whose credulity is at least equal to their learning and industry. It may be concluded, however, I apprehend, that the meal-worm, or larva of the common black-beetle, and the larvæ of those varieties of the fly, which are aquatic in that state of their existence, are occasionally inmates of the human body. The cases just quoted respecting the latter, accord with each other, and with the two related above, in the circumstance that the larvæ occurred in considerable numbers at the same time.

Might not the internal exhibition of the oil of turpentine be resorted to with some probability of success in such cases? Experience has now determined the efficacy of this medicine in the

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* Loc. cit. lib. II. cap. 50.—Tab. II. fig. 2.

† See Med. Chirurg. and Anatomical Cases and Experiments, communicated to the Royal Academy of Sciences at Stockholm, translated from the Swedish. 1757. Case XXIV.

destruction of the tape-worm; * it has been used with success by glyster in the case of ascarides; † and Dr Lempriere found it serviceable when injected into the passages infested by maggots.

[*Note by the Editors.*]

We have good grounds for believing, notwithstanding the difficulties and doubts which still obscure the subject, that the larvæ of certain insects may exist in the human intestines, and that they have in many instances been voided by stool. We have found in our portfolio some examples of this, furnished by our correspondents; and amongst other drawings of such grubs sent by Dr Cheyne, now of Dublin, and Dr Kellie of Leith, those sent by Dr Cheyne, No. 4—7, which, from a comparison with fig. 24th, plate 3d, of Joerden's great work on the insects infesting the human body, seem to be the larvæ of the *Musca carnaria* or flesh-fly, much resemble fig. 3d and 2d of Dr Bateman's specimens; and that furnished by Dr Kellie, No. 8, seems identical with fig. 1st. This coincidence is remarkable and satisfactory.

XII.

Case of Fungus Hæmatodes. By John Henry Wishart, Fellow of the Royal College of Surgeons, and one of the Surgeons to the Public Dispensary of Edinburgh.

James Mason, a child about three years old, was brought to the Dispensary on the 7th August 1810, on account of a tumor, as large as the fist, situated on the right side of the head, surrounding the ear, and extending from the zygomatic process downwards on the anterior side of the neck. This tumor was soft and inelastic; the integuments covering the part anterior to the external ear, were of a whiter colour than natural, but immediately behind the under part of the ear they had ulcerated, and a small fungus was observed to protrude, discharging a thin very fetid sanies, frequently mixed with blood, and occasionally a slight hemorrhage occurred. The cartilaginous part of the ear was situated on the most prominent part of the tumor, being separated about an inch and a half from the cranium; a brown-

* See Edin. Med. and Surg. Journal, for April and July, 1810.

† See Trans. of the Med. Society of London, Vol. I. p. 1. 1810.

Larvæ discharged from the Human body

Fig. 1.

Fig. 2.

Dr. Bateman's Cases

Fig. 3.

Fig. 4.

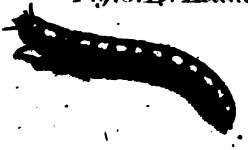
Fig. 5.

Dr. Cheyne's Case

Fig. 6.

Fig. 7.

Fig. 8. Dr. Kellie's Case



E. Mitchell fecit.

ish substance protruded from the meatus externus, resembling in colour the surface of the ulcerated part.

The child appeared lively, and none of his senses were affected; he had a cough, which the mother supposed to be the hooping-cough; his appetite was bad; but in other respects his general health was good.

About nine weeks previous to this period, without any apparent cause, the child began to complain of a severe pain in the right ear, from the external meatus of which a thin fetid fluid was discharged, at times slightly tinged with blood. About a fortnight afterwards he met with a fall, which was supposed by the parents to be the cause of a polypous tumor, which was perceived filling up the meatus externus. About a fortnight after the appearance of this growth, a general swelling was observed around the ear; no change of colour was remarked, except in a small spot about the size of a shilling behind the ear, which was of a pale livid colour.

About this time, *i. e.* a month from his first being observed to complain, a small hard lump was felt over the zygoma, but it did not seem to be attended with any pain. The swelling now increased rapidly in size, and extended chiefly backwards, and downwards along the side of the neck. The posterior part was moveable, but at the edge of the condyloid process of the lower jaw, it seemed very firmly attached to the subjacent parts. The ear continued to be pushed outwards, and formed the apex of the tumor. Three weeks after its appearance the livid spot ulcerated, and a fungus grew from it, which frequently sloughed off, but was quickly regenerated, and discharged a large quantity of fetid bloody matter, and frequently hemorrhage to the extent of an ounce or two occurred.

As the patient lived at Leith, I was prevented from seeing him regularly, and he soon grew so weak as to be unable to be brought to the Dispensary; but by Dr Kellie's assistance I was enabled to collect the following particulars. The ulceration and size of the fungus kept pace with the increase of the size of the tumor. About three weeks before the child's death, he was attacked by diarrhœa, and during that time the tumor increased very rapidly, and its substance became much softer. The ulcerated fungus discharged large sloughs, attended with more alarming hemorrhage; a larger fungus protruded from the external meatus of the ear.

About a month before death, the lower jaw was observed to have the appearance of being dislocated, though the mother said she had remarked it three months before; but till this time he

could always chew his food very well. Four days before death, he complained of a severe pain in the tumor and in the right eye, and he could not shut the right eyelid. He was able to sit upon his mother's knee the day before his death, which happened on the 22d September, exactly fifteen weeks and four days after the first appearance of the disease.

Dissection.

The tumor was examined after death, in presence of Dr Kellie of Leith and of Dr Gordon of Edinburgh. Our attention was first attracted by the enormous size of the tumor, which was fully as large as the child's head. A drawing of it was not taken, as it very much resembled the engraving of Mr Astley Cooper's case, inserted by Mr James Wardrop in his excellent work on Fungus Hæmatodes. The only difference was, that in this case the upper part of the tumor was attached higher up on the cranium, and the external ear was carried outwards, and formed the apex of the tumor. The ulceration behind the ear was more than four inches in diameter; the fungous mass was soft and friable, and had a most offensive smell. The tumor was removed by a circular incision: it weighed forty ounces.

On examining the cranium after the separation of the morbid mass, an aperture was observed in the squamous portion of the temporal bone. After sawing off the upper part of the cranium, we found that a small part of the tumor had passed inwards through the aperture in the temporal bone, and formed a depression on the middle lobe of the brain, about half an inch in depth. This portion of the tumor was as large as a small egg, of a round shape, connected to the large external tumor by a narrow neck, but did not adhere to the brain; the dura mater was destroyed at the part where the depression was formed. The brain was in other respects sound.

On comparing a slice of the brain with a slice of the tumor, the appearance was so similar, that it was almost impossible to distinguish them from each other. The only difference that could be perceived was, that the texture of the tumor was firmer than that of the brain. On dividing the small internal tumor, it was found to be formed of the same medullary-looking substance. On dividing the tentorium cerebelli, a white spot about the size of a sixpence was observed on the surface of the cerebellum. This appearance was caused by another small irregular shaped tumor, protruding from the internal meatus auditorius; the whole of the pars petrosa of the temporal bone was awanting.

On continuing the examination of the external tumor, it was

found to extend inwards and backwards under the lower jaw, towards the posterior part of the cavity of the mouth. The condyloid process of the lower jaw was destroyed. The zygoma was also gone, and the articulating cavity under it filled up by the tumor.

This case affords another example of the very rapid progress, and almost universally fatal termination of this disease. The quick increase of size indeed was very remarkable, only six weeks having elapsed from the appearance of the child at the Dispensary, when the tumor was as large as the fist, to the termination of the case, when the tumor was as big as the child's head. No attempt was made to remove the tumor, as it had ulcerated, and seemed so firmly attached behind the angle of the jaw; for it has been remarked, that any operation in cases of this disease, except when it is situated on the extremities, invariably accelerates the fatal termination, and the dissection afterwards completely showed the impracticability of such an attempt in the present case. The very slight derangement of the patient's health was also very striking. During the whole progress of the disease, till within a few days of his death, he slept well; had no thirst; heard distinctly; and the mother even expressed some doubt, whether the hearing on the affected side was impaired or not; his vision was also unaffected till the four last days of his life, when it was supposed that he did not see so well with the right eye. He was never observed to be drowsy or comatose; and he could move both the upper and lower extremities freely: the latter were slightly œdematous.

With regard to the structure of the morbid mass, a better opportunity has seldom occurred of comparing it with the substance to which it bears so striking a resemblance, viz. brain, and no case more fully illustrates the correctness of the appellation of *medullary sarcoma*, given to this morbid structure by Mr Abernethy. I am very much puzzled to assign a conjecture, with regard to the origin or cause of the disease. Had there been no internal tumor, we might have supposed that the external mass had been formed by an enlargement of some lymphatic gland surrounding the parotid; but how are we to account for the destruction of the temporal bone, and for the small internal tumor? Are we to suppose, that when the tumor had acquired a certain size, instead of increasing outwardly, it caused an absorption of the bone, and proceeded inwards; or are we to suppose, that the origin of the internal tumor was simultaneous with the external, and that their united pressure destroyed the intervening bone? —But we have no mark in the history of the case, to enable us to decide at what period this happened.

XIII.

Case of Preternatural Anus, found in a Portion of Ilium protruded at the Umbilicus. By J. PEAKE, Member of the Royal College of Surgeons, London.

E. I. was delivered by me on the 1st July 1810, of a male child, in appearance healthy, and of a size as large as most children, after the full period of the utero-gestation.

At the time of its birth, my attention was much excited by the appearance of a tumor at the umbilicus, somewhat larger and longer than a walnut, and the cuticle from the abdomen growing over it, to the extent of about the fourth part of an inch. At the upper part of the tumor, the umbilical vessels were passing, and seemed altogether distinct from it. Around them a ligature had been passed, and tied in the usual manner, at a part of the funis where its size was natural; about three or more inches, I should think, from the umbilicus.

Upon examining the tumor, it had the appearance of a protruded portion of intestine, within the umbilical cord; and at its lower part I could observe a fissure, but which, at the moment, I neither discovered or suspected to be pervious. Soon, however, after I left my patient, the women in attendance noticed something passing from it, of a thin consistence and dark in colour, which, no doubt of it, must have been the meconium.

Soon after its birth, the child was sick, vomited frequently, and was at times, until its death, which happened between two and three days after, much convulsed. What food was given it was either directly brought up again, or it afterwards passed at the aperture at the navel. Nothing seemed to pass along the regular course of the intestines. Just before its death, however, there was a discharge from the anus, of a small quantity of meconium, together with a little slimy mucus.

Upon dissection, I found that the passage from the stomach, along the course of the alimentary canal, to the protrusion at the umbilicus, was perfect, and the intestines so far of their natural and healthy appearance. But this was no longer the case after they had passed the umbilicus. A portion of the ilium was there protruded, in which was the aperture already described. From this there was an indirect communication along the course of

the intestines; but the orifice of the gut, in continuation, was much smaller than at its termination in the protruded portion at the aperture; and it was so situated to the one side the gut, at the same time twisting suddenly downwards, that nothing could readily pass. From this the intestines, along their whole course, were very much diminished in size, and both cæcum, colon, and rectum, were considerably smaller than the small intestines.

Chipping Ongar, Essex,
22d November 1810.

XIV.

Appearances upon Dissection of two Dogs, which were killed while labouring under Rabies Canina. By J. Peake, Member of the Royal College of Surgeons, London.

It is now about three years ago that the inhabitants of this neighbourhood were continually alarmed by the appearance of mad dogs among their cattle, and which, in several instances, did considerable mischief. One farmer had three of his cows bitten, and was afterwards obliged to kill them, while labouring under the disease. Several similar incidents occurred also at different places about this time; but I did not understand that the disease was communicated in any one case to the human species. One of the dogs being at length killed, I procured him afterwards for the purposes of dissection. But before I proceed to notice, more immediately, the appearances observable after death, it will be right, perhaps, to mention the extent of his depredation here, which led to a suspicion that he was mad, and consequently to his being killed.

The dog was observed, by a gentleman on horseback whom he had followed for the distance of two miles, to snap at, or bite every animal that came in his way; and he was seen to do this by many persons as he passed through this town. A large Newfoundland dog was the first he attacked, (this animal went mad and ran off about *three months* afterwards, and was killed.) He then bit a horse in the nose, and snapped at another Newfoundland dog which was running by the side of the horse, but his teeth could not be seen to have penetrated the skin. In the horse, the parts were immediately extirpated and cauterized, and he

has never been affected with the disease; the dog also has remained well. He snapped at several others, but no one of them except the Newfoundland dog above mentioned went mad. He was at length killed, after running some few miles further, and had been dead several days before I could procure him. From his emaciated appearance, he had run, I should think, a considerable distance, but from whence I could not ascertain, nor could I learn any further particulars than what have been recited.

I had been lately taught, that the seat of this disease existed in the mucous membrane of the stomach and œsophagus; these parts, therefore, alone, I minutely examined.

Upon opening the stomach, I found it nearly empty, containing, however, a little short oat straw, some dirt or grit, and a small quantity of the gastric juice. The mucous membrane itself appeared red and inflamed at different parts, as well in the stomach as in the œsophagus. The intestinal canal was for the most part empty, and of its natural appearance. In the rectum, there were some hardened feces, exceedingly fetid and offensive, and looked somewhat like earth, being gritty and of that colour. A small portion of it was, as is already stated, contained with the straw in the stomach.

I had, soon after this, a second opportunity of examining another dog, which had been killed while labouring under symptoms similar to the one in the aforementioned case. This animal had bitten a horse and several dogs; the latter (except one, and that went mad about five weeks afterwards), were immediately destroyed. In the horse, the parts were directly extirpated and cauterized, and he still remains well.

I inspected this dog the day after his death, and upon opening the stomach, found it to be much distended with pieces of straw, hair, (which I suppose he had bitten off other dogs, and swallowed) and some grit or earth. The mucous membrane appeared slightly red and inflamed, generally; but at that extremity of the stomach, near to the pylorus, was a large spot about the size of a shilling, of a greenish appearance; a narrow line, also of the same colour, was seen extending upwards, and both I think resulting evidently from inflammation which had existed there. The œsophagus was of its natural and healthy colour. At the back part of the fauces, was a good deal of frothy liquid, and the intestines were much more full than in the other cases, containing feces of a thin consistence and bilious colour.

Chipping Ongar, Essex,
Nov. 22d 1810.

MEDICAL EXTRACTS, No. IV.

The Croonian Lecture. By WILLIAM HYDE WOLLASTON, M.D. Sec. R. S.

THERE is certainly no source from which we can borrow our Medical Extracts with so much advantage to our readers, as the transactions of those societies of learned men who have been appointed for the purpose of promoting the advancement of science and literature. Among these the Royal Society of London stands pre-eminent, both for the intrinsic value of its publications, and the regularity with which they appear. The great expense, however, of their volumes, and the very remote connexion which a large portion of them has with our science, prevent them from being generally in the hands of medical practitioners; and yet there is not a volume which does not contain much valuable information immediately interesting to us. Of some of the papers in which this is contained, a very short notice, or analysis, is sufficient, or a critique may be necessary; but others do not easily admit of condensation or argument, and require to be borrowed with very little abridgement. Of this nature are the second and third parts of Dr Wollaston's Croonian Lecture.

The first part treats of the *Duration of Muscular Action.* He conceives every effort, though apparently single, to consist in reality of a great number of contractions, repeated at extremely short intervals. He was led to infer this, from the sensation resembling most nearly the sound of carriages at a great distance, passing rapidly over a pavement, excited by pressing the point of the finger into the ear, when the finger is kept rigid by the extensor muscles.

The second and third parts we extract entire.

" Part II. *On Sea-Sickness.*

" The second remark which I have to offer to the Society, relates to sea-sickness, the cause of which has not hitherto been fully explained; and although the explanation which I am about to propose, may not appear altogether satisfactory to persons who, when at sea, are also rendered giddy by the incessant motion of the waves, and are consequently liable to consider as cause and effect phenomena which in their minds are constantly associated, yet the observation on which it is founded may deserve to be recorded, on account of the degree of relief that may be obtained in that most distressing affection.

" After I had been harassed by sea-sickness during a short voyage for some days, and had in vain attempted to account for the difference between the inexperienced passenger, and those around him

more accustomed to the motion of the sea, I imperceptibly acquired some power of resisting its effects, and had the good fortune to observe a peculiarity in my mode of respiration, evidently connected with the motion of the vessel, but of which, in my then enfeebled state, I was unable to investigate either the cause or consequence. In waking from a state of very disturbed sleep, I found that my respirations were not taken with the accustomed uniformity, but were interrupted by irregular pauses, with an appearance of watching for some favourable opportunity for making the succeeding effort; and it seemed as if the act of inspiration were in some manner to be guided by the tendency of the vessel to pitch with an uneasy motion.

"The mode by which I afterwards conceived that this action could primarily affect the system, was by its influence on the motion of the blood; for, at the same instant that the chest is dilated for the reception of air, its vessels become also more open to the reception of the blood; so that the return of blood from the head is more free than at any other period of a complete respiration. On the contrary, by the act of expelling air from the lungs, the ingress of blood is so far obstructed, that, when the surface of the brain is exposed by the trepan, a successive turgescence and subsidence of the brain is seen, in alternate motion with the different states of the chest. It is probably from this cause that, in severe headachs, a degree of temporary relief is obtained by occasional complete inspirations.

"In sea-sickness also, the act of inspiration will have some tendency to relieve, if regulated so as to counteract any temporary pressure of blood upon the brain; but the cause of such pressure requires first to be investigated.

"All those who have ever suffered from sea-sickness (without being giddy) will agree that the principal uneasiness is felt during the subsidence of the vessel, by the sinking of the wave on which it rests. It is during this subsidence that the blood has a tendency to press with unusual force upon the brain.

"If a person be supposed standing erect upon deck, it is evident that the brain, which is uppermost, then sustains no pressure from the mere weight of the blood, and that the vessels of the feet and lower parts of the body must contract, with a force sufficient to resist the pressure of column of blood, of between five and six feet from the head downwards.

"If the deck were by any means suddenly and entirely removed, the blood would be no longer supported by its vessels; but both would fall together with the same velocity, by the free action of gravity; and the same contraction of the vessels which before supported the weight of the blood, would now occasion it to press upon the brain, with a force proportional to its former altitude.

"In the same manner, and for the same reason, during a more gradual subsidence of the deck, and partial removal of support, there must be a partial diminution of the pressure of the blood upon its vessels, and consequently, a partial reaction upon the brain, which would be directly counteracted by a full inspiration.

"The consequence of external motion upon the blood will be best elucidated by what may be seen to occur in a column of mercury similarly circumstanced.

"A barometer, when carried out to sea in a calm, rests at the same height at which it would stand on shore: but when the ship falls by subsidence of the wave, the mercury is seen apparently to rise in the tube that contains it, because a portion of its gravity is then employed in occasioning its descent along with the vessel; and accordingly, if it were confined in a tube closed at bottom, it would no longer press with its whole weight upon the lower end. In the same manner, and for the same reason, the blood no longer presses downwards with its whole weight, and will be driven upwards, by the elasticity which before was merely sufficient to support it.

"The sickness occasioned by swinging is evidently from the same causes as sea-sickness; and that direction of the motion which occasions the most piercing sensation of uneasiness, is conformable to the explanation above given.

"It is in descending forwards that this sensation is perceived; for then the blood has the greatest tendency to move from the feet towards the head, since the line joining them is in the direction of the motion. But when, in the descent backwards, the motion is transverse to the line of the body, it occasions little comparative inconvenience, because the tendency to propel the blood towards the head is then inconsiderable.

"The regularity of the motion in swinging, afforded me an apparently favourable opportunity for trying the effect of inspiration; but although the advantage was manifest, I must confess, it did not fully equal the expectations I had formed from my experience at sea. It is possible that the suddenness of the descent may in this case be too great to be fully counteracted by such means; but I am inclined to think that the contents of the intestines are also affected by the same cause as the blood; and if these have any direct disposition to regurgitate, this consequence will be in no degree counteracted by the process of respiration.

"A friend of mine informed me, that he had endeavoured to counteract this mechanical effect upon the stomach, and had experienced immediate relief from a slight degree of sea-sickness, by lying down upon the deck, with his head towards the stem of the vessel; by means of which, upon pitching, he was in the attitude of a person descending backwards in a swing.

"Whether the stomach be or be not thus primarily affected, or only by sympathy with the brain, the sensation of sinking is in all cases referred directly to the stomach, which is seized with such instantaneous retching, that no person, who has not been so situated, can form a just conception of it.

"In thus referring the sensations of sea-sickness in so great a degree, to the agency of mere mechanical pressure, I feel confirmed, by considering the consequence of an opposite motion, which by too quickly withdrawing blood from the head, occasions a tendency to

faint, or that approach to fainting which amounts to a momentary giddiness, with diminution of muscular power. At a time when I was much fatigued by exercise, I had occasion to run to some distance, and seat myself under a low wall for shelter from a very heavy shower. In rising suddenly from this position, I was attacked with such a degree of giddiness, that I involuntarily dropped into my former posture, and was instantaneously relieved by the return of blood to the head, from every sensation of uneasiness.

" Since that time, the same sensation has frequently occurred to me in slighter degrees, and I have observed that it has always been under similar circumstances of rising suddenly from an inclined position, after some degree of previous fatigue. Sinking down again immediately removes the giddiness; and then, by rising a second time more gradually, the same sensation is avoided.

" Part III. *On the salutary Effects of Riding, and other Modes of Gestation.*

" In the preceding instances of disturbing the circulation of the blood, by external motion, the effect is disagreeable, and proportionally prejudicial. There may indeed be cases of disorder, in which it will be salutary; but these are probably less frequent than is generally supposed.

" In the observations which follow, general opinion will concur with me, on the benefit derived from external, or passive motion; and I hope, that in ascribing its good effects to their true cause, I shall enable others to make a valuable distinction, which has not yet been preserved with due care, between one motion which is salutary, and another which is very frequently pernicious. For, although the term *gestation* is employed by medical writers, as a general term comprehending riding on horseback, or in a carriage, and although the merits of such motions, especially the former, were clearly noticed, and perhaps even overrated, by the discernment of Sydenham, I believe that no explanation has yet been given, of the peculiar advantages of external motion, and am persuaded, that the benefits to be derived from carriage-exercise, are by no means in so high estimation as they ought to be.

" Under the common term *exercise*, active exertion has too frequently been confounded with passive gestation, and fatiguing efforts have consequently been substituted for motions that are agreeable, and even directly invigorating, when duly adapted to the strength of the invalid, and the peculiar nature of his indisposition.

" The explanation which I am about to offer, of the effects of external motion upon the circulation of the blood, is founded upon a part of the structure observable in the venous system, the mechanical tendency of which cannot be doubted. The valves which are everywhere dispersed through those vessels, allow free passage to the blood when propelled forward, by any motion that assists its progress; but they oppose an immediate obstacle to such as have a contrary tendency. The circulation is consequently helped forward by

every degree of gentle agitation. The heart is supported in any laborious effort that may have become necessary, by some obstacle to its exertions; it is assisted in the great work of restoring a system, which has recently struggled with some violent attack; or it is allowed, as it were, to rest from a labour, to which it is unequal, when the powers of life are nearly exhausted by any lingering disorder.

"In the relief thus afforded to an organ so essential to life, all other vital functions must necessarily participate: and the various offices of secretion and assimilation, by whatever means they are performed, will not fail to be promoted during such comparative repose from laborious exertion.

"Even the powers of the mind itself, though apparently least likely to be influenced by mere mechanical means, are manifestly, and in many persons, most immediately affected by these kinds of motion.

"It is not only in cases of absolute deficiency of power to carry on the customary circulation, that the beneficial effects of gestation are felt, but equally so, when comparative inability arises from redundancy of matter to be propelled. When, from fulness of blood, the circulation is obstructed, the whole system labours under a feeling of hurry and agitation, with that sensibility to sudden impressions, which is usually termed nervousness. The mind becomes incapable of any deliberate consideration, and is impressed with horrors that have no foundation, but in a distempered imagination.

"It is in moderate degrees of this species of affection, that the advantages of carriage exercise are most sensibly felt. The composed serenity of mind that succeeds to the previous alarm, is described by some persons with a degree of satisfaction, that evinces the decided influence of the remedy. With this steadier tone of mind, returns its full power of cool reflection; and if the imagination becomes more alive than usual, its activity is now employed in conceiving scenes that are amusing and agreeable.

"As an instance of direct relief to a circulation, labouring from mere fulness of blood, I may adduce that of a person, whose friends, as well as himself, were apprehensive, from the violent and visible throbbing of his heart, of the existence of some organic mischief, and were in some measure alarmed for the consequences.

"He was persuaded, and not reluctantly, to go without delay, for medical advice, and was accordingly conveyed in a carriage to the house of some physician of eminence, but did not succeed in finding him at home. As the symptoms did not appear to admit of delay, and were at least not aggravated by the motion, it was hoped that the wished for advice might be obtained at a part of the town which happened to be at some distance. But the second attempt proved to be as fruitless as the former, and a third was made with the same event. Since the throbbing had by that time considerably abated, he was contented to postpone any further efforts to the following day, and directed the carriage homewards. By the time that he returned to his friends, he found that the motion of travelling o-

ver several miles of pavement, had apparently removed the complaint. The pulsation of the heart and arteries had subsided to their natural standard; and he congratulated himself, that his search of a remedy had not been ineffectual, although he had been disappointed as to the source from which he thought he had most reason to expect relief.

"If vigour can in any instance be directly given, a man may certainly be said to receive it in the most direct mode, when the important service of impelling forward the circulation of his blood is performed for him by external means. The main spring, or first mover of the system, is thereby, as it were, wound up; and although the several subordinate operations of so complicated a machine, cannot be regulated in detail, by mere external agency, they must each be performed with greater freedom, in consequence of this general supply of power.

"In almost every treatise on the subject of chronical diseases, are to be found numerous instances of the benefit produced by the several modes of gestation which have been most generally adopted; as riding on horse-back, in carriages, sea-voyages, and swinging. And, in many cases which might be adduced, it has appeared too clear to admit of a doubt, that the cure of the patient has been owing *solely* to the external agitation of his body, which must be allowed, at least, to have had the effect above explained; that of relieving the heart and arteries from a great part of their exertion in propelling the blood, and *may* therefore have contributed to the cure, by that means only.

"The different modes above mentioned, are adapted, from their nature, to different degrees of bodily strength; and if there are cases, in which that which appears most eligible, may not suit the situation or circumstances of the patient, it cannot be difficult to contrive other means of giving motion, so as least to incommode, and yet to give the greatest relief. A very gentle and long-continued, or even incessant motion, may suit some cases better than any more violent and occasional agitation; and in this way, probably, it is, that sea-voyages have sometimes been attended with remarkable advantage.

THE INQUIRER, No. XXI.

On the Deaf and Dumb.

Few speculations can be more interesting than those which relate to public institutions for the relief of the infirmities of mankind. The just and sound standard of utility is easily assigned. The first object of all charitable establishments, is to contribute to the welfare of society; therefore, the most essential claim to approbation and support, is, that they shall have a

salutary tendency. Foundling hospitals were proved, in a former inquiry, to be useless and injurious. Schools for teaching the deaf and dumb children of the poor, now solicit aid and support; and they seem to deserve encouragement, because the object of instruction is the generation of happiness; and by making individuals happy, who, by their misfortune, are almost struck off the roll of existence, the sum of happiness among the whole species is greatly increased. The instruction of the deaf and dumb, like the early structure of medicine, arose from the energies of individual genius; and by the like efforts of extraordinary intellects, it has been extended, and brought to its present degree of perfection. With respect to the methods of conveying instruction, in awakening the mind, in reading, writing, and arithmetic, it is impossible to describe them. They are admirably calculated to fulfil the intentions of their benevolent contrivers; and it would be to commit the same injustice towards the teachers, if any attempt were made to explain particular parts of their process, as towards an ingenious mechanic, by exhibiting detached parts of a complicated machine. The whole must be seen, in order to be thoroughly understood; we must go and live like the deaf and dumb, in order to learn how the deaf and dumb can be taught to live like men.

Deafness from birth, and consequently dumbness, is more frequent than is commonly imagined. In Eastern courts, it has been usual from time immemorial to retain a number of mutes. These are not only employed to amuse the monarch, but also to instruct his pages in an art, to us little known, of communicating every thing by signs, lest the sounds of their voices should disturb the sovereign. The mutes are also the secret instruments of his private vengeance.

In England the number of deaf and dumb children among the poor is considerable; for at the last election, in July 1810, at the asylum in London, there were seventy-eight candidates and only fifteen vacancies. There are now eighty children under tuition in the asylum. According to the reports of a similar institution at Vienna, which was established in 1779, there are always many candidates whenever a vacancy occurs. That institution is supported by an annual pension from the government; and forty-five boys are admitted on the foundation, besides day-scholars and boarders, whose circumstances enable them to pay for their instruction. It has been calculated, that in every million of souls in the German empire, (taking the estimate at twenty-five millions, which it was usually called before the French fraternization), one hundred are deaf and dumb: of these, only thirty in every hundred are supposed to be capable of being taught; the rest being too young, too old, or too much diseased in other

parts, besides the organ of hearing. Cretins are not included in this enumeration. Some other statistical reports make the number of deaf and dumb in the Austrian dominions, exclusive of Hungary, and before the late division of the empire, amount to two thousand, of whom 1106 are stated to be of an age between seven and fourteen, proper for admission into the schools. In the Danish dominions, the deaf and dumb amount to 515, in the different bishopricks, whose population is stated at 820,621, according to the returns made at the first anniversary of the institution for instructing the deaf and dumb, held at Copenhagen, on the 28th January 1807. The following are the proportions in the six bishopricks of Denmark, and they are most probably accurate, because the returns were made by the clergy. *

	Inhabitants.	Deaf and Dumb.	One in
In Zealand, among -	3.11065. -	163. -	1902.
In Funen, - -	1.60164. -	113. -	1417.
In Aalborg, - -	1.04986. -	44. -	2386.
In Aarhuus, - -	1.20164. -	61. -	1970.
In Ribi, (or Ripen) -	97585. -	102. -	957.
In Viborg, - -	26657. -	32. -	833.

In the island of Bornholm, the proportion is said to be still greater. The difference is remarkable; but as there is no medical topography of these places, what influence climate may have in occasioning deafness, cannot be determined.

Boys born deaf are more numerous than girls. The director of the school at Vienna (Mr May) stated this difference, in Austria, to be in the proportion of four to one; and there are comparatively very few females in any of the schools, which are established in almost every town in Germany. It has been observed, wherever several children in the same family are born deaf, (not an unfrequent occurrence), they are always of the same sex. Instances are known of deaf and dumb persons, of both sexes, marrying, and having children, who have had their senses quite perfect; but instances on the contrary are more common, and deafness is so often hereditary, that the experiment of marriage should be carefully avoided. Professor Rosenmuller at Leipsic, has dissected the organs of hearing and of speech in persons born deaf, but he found nothing peculiar in them. He has tried galvanism, but without success. One child suffered acute pain during the application of the pile, and seemed to acquire an increased sensibility of hearing for the first month; but this beneficial effect soon disappeared. Galvanism has been tried in other places, but ineffectually. The curious story told by Bishop Burnet in his

* Allgemeine, Literatur-Zeitung. June 1807.

travels, of a girl at Geneva, who could hold a conversation in the dark, by laying her hand upon her companion's lips, is not confirmed by subsequent experience. So few words are pronounced by the movement of the lips, that the history seems improbable. The mode adopted for conversing in the dark, is by writing the word wanted to be communicated, with the finger upon the palm of the hand or on the back of the neck, thus addressing the sense of touch, which, as well as that of sight, is rendered by attention and exercise wonderfully acute.

In congenital deafness, medicine can do very little. In one species, the practical philosophy of Mr Astley Cooper has enabled surgery to do much; but unfortunately, the obstruction of the Eustachian tube is not so common as other causes of deafness; and only a part of the art of curing it is yet learned, while the artist wants to make use of the whole. There is a sect among us who have established their dominion over the ears, and call themselves *aurists*; but their reputation and success are inferior to another self-elected fraternity, denominated by the ancients *gingivistæ*, who proceed on the very rational hypothesis not to cure, but to remove the part affected.

As a matter of curiosity, it may be mentioned, that the earliest known writer upon the art of instructing the deaf and dumb, is a Spaniard, Juan Pabbo Bonnet. His work is entitled, "Redution de las lettras y arte para ensennar a ablas los Mutos. En Madrid, par Francesco Abarca de Angulo, 1620," in 4to, with eight copperplates, and a table.

PART

PART II.

CRITICAL ANALYSIS.

I.

Des Erreurs Populaires relatives à la Médecine. Par M. Richerand, Professeur de la Faculté de Médecine de Paris, &c. &c. pp. 234. 8vo. à Paris, 1810.

This book is really not worth the perusal. From the title, we expected to find what would have been an useful and instructive work, an imitation of Primerosius *de Vulgi erroribus in Medicina*, adapted to the prejudices and absurdities of the French of the present day; and we were inclined to suspect Professor Richerand of plagiarism, when we found that he took no notice in his preface of the prototype we had assigned him. But our suspicions were unjust, for he has borrowed nothing from Primrose but the mere title, which he most probably saw in some catalogue. Indeed we do not conceive it possible that any one who read the book itself, could have produced so flimsy a performance upon the same subject. For although many of the prejudices combated at length by Primrose are now utterly exploded, and although not entirely free from the medical prejudices of his age, there are many of his chapters which are still deserving of careful perusal, independently of the correctness of his language, the terseness of his style, the good sense which pervades every part of his volume, and the satisfactory manner in which he treats each separate subject, always illustrating it sufficiently, and never allowing himself to digress into irrelevant matter. Richerand's production is of a totally different nature; and the reason is very obvious. The work of our countryman is evidently the result of much reflection; and, if we mistake not, it was often revised and corrected before it was presented to the public. Its author endeavoured to render it a lasting monument of his knowledge and talents. Not so our present author. It appears to us, that, having resolved to write a book which should sell, he had met with a title which suited his purpose; and, without any settled plan, or

knowing how he was to make a volume of it, he sent each sheet to the press, whilst the ink with which it was scrawled was still wet. Accordingly, notwithstanding his declamatory diffuseness, and his treating at great length of many things totally unconnected with his subject, we find him obliged to swell his empty volume with an appendix of paradoxes.

As Richerand has some celebrity, it will be necessary to justify so severe a judgment of his latest publication. He begins by telling us that the object of his work is not to instruct the public in the art of curing diseases, but to prove to them that there is no science less accessible to them, and more difficult and dangerous in practice. He also informs us, that he will not notice points still unsettled, and that no doubtful opinion will be advanced. He will only speak of those erroneous practices, to which time, instead of weakening or destroying them, daily gives its sanction and support; nor does he pretend to have collected *all* the errors relative to medicine, but only those most diffused, and consequently most dangerous. He divides his work into three parts. The first is devoted to errors in the physical education of infants, the second to those relating to health and its preservation, and the last to diseases and remedies. So far there is little to censure. We admit that a work upon this plan, if well executed, might have done much good, and we even forgive him for his whimsical project of a "*Code of Errors*," in the completion of which he proposes, that the most enlightened men in every department of science should unite their talents.

To the popular errors in the physical education of infants, he devotes no less than twelve pages! And these are occupied in proving that midwives cannot mould the heads of new-born infants according to their notions of beauty; that Aulus Gellius anticipated Rousseau in showing that mothers ought to suckle their children; but that the philosopher of Geneva exaggerated the matter, when he declared that the child had no evil to fear from the blood of which he was formed, and that new-born infants should be bathed in cold water. Having finished his corrections of Rousseau's errors, our author proceeds to say, that heavy machines ought not to be employed for the cure of crooked spines; that sympathetic purging from teething should not be checked; that children do not suck away their senses, by being kept at the breast three years; that *nævi materni* do not proceed from the imagination of the mother, and it was unnecessary for a certain German writer to compose a very large and indelicate book in Latin to prove the contrary, especially as Germans have no wit, and a translation of it would hurt the delicacy of the French; and lastly, were he to speak of the absurdity of necklaces to facili-

tate dentition, and such like prejudices, he would be wielding the club of Hercules to crush an insect!

Our readers will readily pardon us if we should not proceed through the remaining chapters so minutely. In that on the means of health, he runs over very rapidly the six non-naturals, proves that oysters do not dissolve in milk, relates an anecdote of an awkward footman, who, on breaking a glass decanter, acknowledged that he had been handling parsley, and launches out into episodes against the *Schola Salernitana*, and the Domestic Medicines of Buchan and Tissot.

The errors in relation to diseases occupy the greater part of this volume, as in reality they are more numerous; but as our author has treated his subject, many of his observations are totally misplaced; and notwithstanding his prefatory promise, we find him entering upon many disputed points, and advancing opinions far from having the unanimous support of every intelligent person. At the very outset, he discusses the doctrines of the incarnation of wounds, and accuses the supporters of the regeneration of nerves, of the falsehood of stating experiments which they never performed, and observations they never made. *Courir comme un dératé* is, it seems a French proverb, the absurdity of which Richerand thinks it necessary to expose; and then comments, not very consistently in a book upon popular errors, at considerable length upon a series of proverbs, which, he says, "renferment un sens profond et vrai caché sous une expression triviale;" and they are very convenient; for example, "C'est une machoire," gives him an opportunity for filling two or three pages with an account of Camper's facial angle; and the last of his proverbs, "*Vieux médécin et jeune chirurgien*" brings him back to his subject, by leading him to examine the prejudices which exist among the public, in regard to the practitioners worthy of their confidence, in the course of which we meet with various illiberal and narrow notions. We learn from it, however, that the "*Officiers de santé*" of modern France are profoundly ignorant, and that the creation of the new sect of practitioners will inevitably rob the profession of medicine of all its lustre. He even proposes to suppress them. "Is the most learned physician always the most skilful and worthy of our confidence?" Our author thinks not.

"There is a quality more desirable and more useful than the most profound science, I mean *tact*, that precious quality, refused or granted by nature, and which is in medicine what taste is in literature. It consists in sensibility, happily perfectionated by education. He who enjoys it, astonishes us by views as prompt as they are fine and delicate, and by determination as just as rapid. The physician possessed of the gift of *tact*, alone has, in the moment of danger, those happy

inspirations, or, to use the sublime expression of Bossuet, those sudden *illuminations* which reveal to him what ought to be done, and which gives him the necessary confidence to strike the decisive blow. While the learned physician, overwhelmed with the weight of superfluous science, hesitates and wavers uncertain among the thousand means presented by it to him; the former, "*moins savant mais mieux savant*," as Montaigne precisely expressed himself, seizes the essential circumstances, and without attending too much to accessory phenomena, the rock on which the learned commonly strike, sees with certainty the object and end."

But what, will our readers say, is the object and end of all this declamation?—To prove that the French excel the rest of the world in physic as in war.

"In regard to *tact*, the French physicians seem to me superior to those of other nations. The incontestable preeminence of French surgery is universally acknowledged. Their medicine, properly so called, appears to me to possess the same superiority. Perhaps less learned than the Germans, the French physicians excel them in practice. Less profound tacticians than the Germans, our soldiers are superior to them, and supply by valour, activity, precision of *coup-d'œil*, rapidity of determination, and celerity of movement, what they may want in the knowledge of principles. I think that it is the same in medicine—a science, in that point of view, more analogous to the art of war than is commonly imagined."

Who can read this without regretting that Bonaparte had not been sent to study medicine at Turin, or even bound apprentice to a surgeon at Aiaccio, instead of going to the Ecole Militaire? As he is the first general, so would he have been the first physician in the world; and his skill, exercised in the Hotel Dieu, might have saved as many lives as, in the field, it has cost his German adversaries.

But of all the popular errors, that which interests our author most, is the esteem in which it would appear that German physicians are held in France. "The time is not yet far distant, since, to speak bad French, *Germaniser*, was at Paris an almost infallible means to succeed as a physician." How absurd to prefer learning to *tact!* Then we are told that the Germans are so cold and calculating a people, and yet the most susceptible of any of seduction, *entrainement* and enthusiasm: Van Helmont, Stahl, and Hoffmann wrote in Germany. It was there the Free Masons, Rosicrucians, and Illuminati flourished. There the dogmas of the Romish Church were first disputed; and there Leibnitz, Wolf, Swedenborg, Kant, and Lavater, were born. When, to all these irrefragable arguments, we add, that even in the times of Tacitus, *Auspicia sortesque ut qui maximè observant*, who can hesitate to adopt our author's conclusions, that "this disposition,

so remarkable in the minds of the German physicians, and men of science, depends upon climate;" and that the Italians and the English, whom our author is pleased to compliment as the real rivals of his countrymen, are, as well as the French, much superior to the odious Germans, in all the departments of science, art, and literature.

We have already mentioned, that M. Richerand has eked out his volume with an appendix, consisting of *paradoxes.* Our readers will naturally imagine that they are at least medical paradoxes, of which, even in the common acceptation of the term, there is no deficiency, and from which, in our author's interpretation, *truths which may be disputed*, we scarcely know a medical opinion to be excluded. But M. Richerand's paradoxes have nothing to do with medicine, and must have been inserted here either to swell the volume to a proper size, or because he thought them very clever. Our readers shall judge for themselves. They are as follows. No writer of comedies has excelled except in depicting his own character. It is owing to the perfection of their language, that the French have subjugated Europe. The prodigious vanity of the French character, is the reason why they have never produced a good historian, but excel in writing memoirs, in which each author is the hero of his tale. The authors of the nineteenth century are decidedly superior to their predecessors in only one species of composition, the art of writing gazettes!

II.

Essai sur Les Maladies et les Lesions Organiques du Cœur et des Gros Vaisseaux; extrait des Leçons Cliniques de J. N. Corvisart, *Premier Medecin de l'Empereur, &c. &c.* Publié sous ses yeux, par C. E. Horeau, M. D., Chirurgien des Infirmerie et Maison de l'Empereur et Roi. à Paris, 1806. 8vo. pp. 484.

Organic diseases of the heart appear to be of far more frequent occurrence than is generally suspected. It is even asserted by the author of the excellent essay now before us, that, in the course of his multiplied observations and dissections, in public and in private, he has met with these diseases far oftener than organic lesions of any other viscus whatever.

The symptoms to which organic affections of the heart give rise, are in many instances so equivocal, and their analysis and

diagnosis so difficult and obscure, that there is reason to suppose they are often overlooked or misunderstood; and that physicians not very profoundly instructed in pathological anatomy, may have registered as examples of asthma, hydrothorax, or other supposed idiopathic diseases, cases which were truly symptomatic of disorganization of the heart.

The work of our ingenious countryman, Mr Burns, has already passed our review, and received our highest approbation, as clearing the way to a more accurate discrimination of the diseases of the heart. And the Essay of Corvisart, which has more lately reached us, though of earlier publication, introduces the reader to a very intimate acquaintance with this most interesting branch of morbid anatomy, which he has enriched by a great number of original observations.

Before giving any account of these, it appears necessary to inform our readers, that, besides the inferences which may be collected from the comparison and analysis of the symptoms which attend the different cases, our author, in forming his diagnosis, places much confidence in the information obtained from the percussion of the thorax, in the way recommended by Auenbrugger. This consists in striking the different parts of the chest with the ends of the fingers. If the lungs be sound, and if the cavity of the thorax be occupied by no foreign body, solid or fluid, the sound occasioned by this percussion has been compared (with some exaggeration indeed), to that of an empty barrel; on the contrary, when a solid or liquid body occupies any part of the thoracic cavity, the side of the thorax, or that part of it so occupied, gives a duller sound, compared to that yielded on striking the thigh in the same manner. Such, says Mr Corvisart, is the precision of this method, that I have often determined, with great exactness, the degree of dilatation of the heart, by measuring it, as it were, upon the extent of the chest over which the percussion yielded no sound, or only an obscure one: often, after the death of the subject, I have verified the fidelity of my diagnostic, established by means of this percussion.

The order in which the different diseases of the heart are arranged in this essay, is that pointed out by the varieties of structure. The first class comprehends the diseases of the membranous coverings of the heart.

Pericarditis, or inflammation of the pericardium, and membrane immediately covering the heart, is very commonly complicated with inflammation of other thoracic viscera, but sometimes exists without such complication. In some cases, the attack is at the first violent, and its course and termination rapid. In

other cases, its invasion is insensible, its progress insidious and obscure, and its termination very slow. From his observations, M. Corvisart has distinguished three varieties of the disease, the acute, subacute, and chronic. The acute is that which is most commonly complicated with other inflammations within the chest. The subacute differs from it, chiefly in its symptoms being more distinct, and its course somewhat less rapid. In the beginning, a severe and burning pain is felt in the region of the heart; the respiration is high and disturbed; the pulse frequent, hard, and seldom irregular; the cheeks, but especially the left one, are suffused with a lively red. About the third or fourth day from the invasion, the countenance is changed to an expression of profound distress and irritation; there is a constant and inexpressible anxiety, and continual agitation; the breathing is high, laborious, and interrupted; slight palpitations and faintings occur; the pulse, which, during the three or four first days, was hard, sufficiently full and regular, now becomes small, frequent, concentrated, and irregular; and, at last, as the disease approaches its fatal termination, it is small, soft, intermittent, almost insensible, and very irregular.

The history of chronic pericarditis is still more obscure. The disease is most commonly complicated with some affection of the heart itself, or with hydrothorax, &c.; complications which increase the difficulty of our diagnosis. In one case related, the breathing was short, frequent, and anxious; the motions of the heart were subject to great variations, and accompanied with a sort of obscure jarring or noise; the pulse was by turns regular, irregular, and intermittent; the patient slept a good deal, but was often disturbed by dreams; he lay on his left side with difficulty, and preferred lying on his back.

Adhesion of the pericardium to the heart is a consequence of the preceding inflammation, and often exists with other organic affections. The symptoms are accordingly various in different cases, and the diagnosis is therefore extremely uncertain. Amongst other signs, are enumerated, as the most common, sudden flushings of the face, occasioned by the disturbed action of the heart; a disagreeable sensation of dragging in the region of the heart, because the organ is drawn downwards by the diaphragm, to which it adheres; respiration high, frequent, and oppressed by the slightest exertion of the body; faintings, irregularity of the pulse. What more particularly serves to distinguish this disease, says our author, is the absence of strong palpitations, so common in almost every other organic affection of the heart. But when the heart adheres to the pericardium, it is bound down, and has

not room to perform those violent and extraordinary actions, which constitute palpitations. Its contractions are irregular, but dull, profound, obscure, and imperfect, rather than violent and extraordinary.

Dropsy of the pericardium.—Those who labour under this disease, have commonly a bloated countenance and livid lips. They experience a painful anxiety, or distressing weight about the region of the heart, and a difficulty in breathing, which threatens suffocation, when they attempt the horizontal posture. They are often liable to faintings, more rarely to palpitations. The pulse is small, weak, frequent, concentrated, and irregular. In applying the hand over the region of the heart, tumultuous and obscure beatings are perceived, as if communicated through a soft, or rather fluid medium, interposed between the heart and the parietes of the thorax. The sound which is yielded on percussion is obscure, or even imperceptible at the anterior and left side, over an extent of surface proportioned to the degree of dilatation of the pericardium. In some cases, the left side of the thorax is higher, rounder, and more prominent than the right side. When the disease has continued long, the strength of the patient is depressed; the lower extremities become œdematous, and sometimes a slight degree of swelling is observable on the left side of the chest. In one case, our author was able to perceive distinctly the undulation of water when his hand was applied over the region of the heart. Another observation, which he has twice made, and considers as a pretty decisive sign of the existence of water in the pericardium, is, the extent of surface in which the beating of the heart can be perceived. When the heart floats freely in water, distending greatly the pericardium, its action may be felt in different points of a pretty extensive circle.

The next class of diseases includes those of the muscular substance of the heart. The principal disease to which the muscular structure of this organ is liable, is aneurism, or dilatation of the heart, of which he distinguishes two species, the active and passive. In active aneurism the heart is dilated, its substance is thickened, and the force of its action is increased.

In passive aneurism, the heart is equally dilated, but its parietes have become thinner, and its force is weakened. The cause of these aneurisms appears to be in general some obstacle at the orifices of its cavities, or of the large blood-vessels, opposing the current of blood. Contraction, or imperfect obliteration of the right ventriculo-auricular orifice, for example, is followed by aneurism of the right auricle. Similar changes of the orifice of

the pulmonary artery, and almost all the acute and chronic diseases of the lungs, opposing the passage of the blood from the right ventricle, will occasion aneurism of the right auricle and ventricle. Any obstacle at the left ventriculo-auricular orifice, will produce aneurism of the right auricle and ventricle, and of the left auricle. Any disease of the aortic valves may give rise to aneurism of all the cavities of the heart.

When such obstacles exist, the heart, with its usual exertions, cannot disburthen itself of the blood sent to it. In the case of active aneurism, it seems to have acquired substance and force, in consequence of continued increased action, just as the muscles of the extremities acquire size and strength by use. In passive aneurism, again, the fibres of the heart seem to have yielded through weakness to constant distension, in like manner, says our author, as the bladder becomes distended in the case of retention of urine.

After having considered all the circumstances illustrative of this general pathology, he proceeds, in distinct sections, to give histories and examples of the different varieties of aneurisms of the heart.

Examples of active aneurism, affecting all the cavities, and whole substance of the heart, are very rare, though the case does sometimes occur. But generally, dilatation, with increased thickness, and strength, is confined to a single cavity, or to one side of the heart. By far the most frequent variety of this species of aneurism, is that in which the left ventricle is thickened and enlarged; the reasons for which seem to be, that the obstruction of the aortic valves, is more common than that of those of the pulmonary artery, and that this ventricle is naturally stronger and thicker than the other. When the left ventricle is affected with active aneurism, it is not uncommon to find the right ventricle affected with passive dilatation. Active aneurisms of the right ventricle are much seldomer met with; and the occurrence of this species, in either of the auricles, is still more rare. Examples of all these varieties, however, are occasionally met with.

Passive aneurism, or simple dilatation without increase of substance, is sometimes, though not often, found affecting at once all the cavities of the heart, and appears always to have for its cause, contraction, or some analogous affection of the aortic orifice. More commonly, however, the disease is less general. The most frequent seat of passive aneurism is the right auricle;—the right ventricle is sometimes alone dilated; but in by far the greater proportion of cases, it is found to be conjoined with passive aneurism of the auricle of the same side. Passive dilatation

of the left auricle, is the least common of all the varieties of this disease. It is even, according to our author's observation, more rarely met with than passive aneurism of the corresponding ventricle.

In enumerating the symptoms produced by aneurisms of the heart in general, he thinks it convenient, if not necessary, to distinguish three different stages of the disease, and to class the signs as they appear externally,—as they are observed in the functions of the brain, in the circulation, in respiration, in digestion, and in the secretions and excretions.

In the 1st stage, the countenance is little altered, but the face is liable to frequent vivid flushes of heat; the limbs yet preserve their form and appearance of vigour, but the patients are easily fatigued. The thorax sounds well on percussion, but there is often a painful feeling about the heart; the patient is subject to headachs and vertigo; hot vapours seem to mount from the chest to the brain; and he is impatient, melancholy and irascible. Palpitations are more or less frequent and distinct; the heart beats within its natural limits; the pulse is differently affected in different cases. The respiration is somewhat short, and easily affected on exertions of any kind; the patient is easily affected by cold, and his catarrhs and coughs are obstinate; the cough is then hard and dry, the expectoration difficult, viscous, sometimes sanguinolent. There is very commonly a feeling of constriction about the throat. The functions of digestion are but little decayed; the bowels are costive; the secretions and excretions are scarcely disturbed.

In the 2d stage, the face is puffed, the cheeks and lips are of a lively red colour, bordering on violet—the form is less plump,—the feet and limbs become œdematous towards night,—the chest sounds well excepting over the heart, where little or no sound is yielded on percussion—the attacks of vertigo are more frequent, and sometimes are followed by faintings—the constriction of the throat is severe, and resembles the globus hystericus; sleep is interrupted by frightful dreams; the mind is unhappy, versatile, and irritable; the palpitations are stronger and more frequent; and the beating of the heart can be felt over a larger space; often is felt in the right side, and in the epigastrium. The pulse in active aneurism is hard, vibratory, frequent, and sometimes contracted; in passive dilatation it is soft, frequent, weak, and easily compressed. In either case it presents occasionally irregularities; the breathing is now much affected, the inspirations are deep and incessantly renewed; the patient can hardly breathe horizontally; he sits up, and leans forward for ease; the cough is strong and frequent; spitting of blood is far from uncommon;

the desire of food may continue, but he is subject to vomiting, and other symptoms of indigestion, and sometimes to diarrhœa; the urinary secretion is occasionally diminished. The extremities are more and more œdematous; other dropsical appearances are common.

In the 3d stage, the face is more tumid and œdematous; the lips, checks and nose are blue, violent and livid; violet-coloured stripes are sometimes observed on the breast and belly; the extremities are chilly. We easily perceive, on striking the chest, from the want of sound, that it is occupied by a solid body; by percussion, our author has traced the extent of the dilatation over the space which gave no sound. The patient is dull and weak, sleeps scarcely any, and is suddenly roused with terror and sense of suffocation; he is tormented with continual anxiety and despair; sometimes he is delirious. On applying the hand over the region of the heart, instead of feeling its ordinary beating, we frequently can only perceive a sort of trembling, a profound and obscure tumult, impossible to describe, but having no resemblance to ordinary pulsations. The pulse is small, frequent, unequal, intermittent, insensible, and thready; the veins, especially those of the neck, are swelled; the respiration is suffocative; the inspirations are forced and difficult; cough frequent, and convulsive; expectoration sanguinolent, sometimes purulent; the appetite and digestion are destroyed; in some there is diarrhœa; in others obstinate costiveness; urine commonly thick, high-coloured, and in small quantity; sometimes, however it will flow more abundantly, and then all the symptoms are even in this stage considerably relieved for a while; again it is suppressed, œdema increases, the cavities become dropsical. When the disease runs through all these stages, the death of the patient is gradual and slow; sometimes, however, it is preceded by convulsions; on the contrary, when the patient dies before the disease has exceeded the second stage, the fatal moment is always sudden and unexpected; it takes place when rising up, when drinking, or when conversing.

Such are the general symptoms of aneurism of the heart; the distinguished signs of active and passive aneurism are next in order to be considered. Here, it is observed, that a sanguine temperament, robust constitution, and the vigour of age, are the predisposing circumstances of the former species; and lymphatic, cachochymic temperament, and weak constitution, of the second kind of aneurism. 2dly, That active aneurism is commonly the consequence of some violent and sudden exertion, or of immoderate exercise, as in running, wrestling, raising great weights and the like, or in singing, blowing wind instruments, &c.; while passive aneurism is more frequently the consequence of debility, of

chronic diseases, of pulmonary and other obstructions to the free circulation of the blood. 3dly, That in active aneurism, the face is full and high-coloured, and the eyes injected, while in passive aneurism, the countenance is pale and fatigued, though sometimes of a violet colour. 4th, That in active aneurism, the pulsations of the heart are abrupt, dry, violent, and often apparent to the sight; and in passive aneurism, they are feeble, slower, and give to the hand the impression of a soft body elevating the ribs, and not that dry hard stroke yielded in the other species. 5th, That in active aneurism, the pulse is frequent, hard, strong, and vibratory; but in passive aneurism, it is weak, soft, and easily compressible. 6th, That in the former, percussion of the thorax gives an obscure sound in a less extended space, because the dilatation is generally less considerable than in the latter.

There are no very decisive signs by which aneurism of the right may be distinguished from aneurism of the left side of the heart. In aneurisms of the right side, however, it is observed, that the pulmonary circulation is earlier and more deranged; the breathing is more affected; a spitting of blood is more common; and the face is more of a violet or livid colour. And the following observations, though each taken singly throws little light on the diagnostic, yet taken together render it highly probable, that the right side of the heart is most affected: such are remarkable pulsation of the jugular veins; the heart felt beating in the right side; and regularity of the pulse, showing that the aortic circulation is free: for in aneurisms of the left side of the heart, the phenomena of the disease are most remarkable in the larger circulation; the face in the beginning is less livid, and rather of a vivid red.

The next affection of the heart, noticed by our author, is *induration of its muscular texture.* In active aneurism, there is increase of substance, but the fibres preserve their contractility and pliability. In this affection, however, which he has more than once met with, the fibres are more rigid than natural, and have lost, in a greater or less degree, their contractile power. In one case, the heart, when opened, instead of collapsing, looked like a fleshy box, and when struck, sounded like a trumpet, "de même que si l'on eut frappé une espece de cornet." In another, the parietes of the heart also preserved the shape of its cavities, and were sufficiently hard to resist compression, and to yield a sound when cut with the scalpel.

This elasticity, this property of giving sound, did not depend on any conversion of the muscular fibre into cartilage or bone, or any thing similar; and yet, in cutting it, the scalpel experi-

enced an unusual resistance, and produced a singular crepitating sound. The symptoms of this disease are not very distinguishable from those of active aneurism, especially in the earlier stages. The pulse appeared to have been small, weak, and almost insensible, although strong and tumultuous throbbings were perceived in the region of the heart.

Transformation of the muscular texture into cartilaginous and osseous substance.—In one case, a great part of the heart had become cartilaginous. The columnæ carneæ had all the properties of cartilage.

Bony matter is often found in the heart.—In one case, the left ventricle was wholly petrified, and the columnæ carneæ resembled stalactites. All these changes, more or less complete, prevent the due and regular contraction of the heart. The slowness, the weakness, and almost total extinction of the pulse observable in the individuals attacked with this disease, show that the circulation of the blood is only impeded; weakened, but not destroyed. The ossification is never complete over the whole heart.

Conversion of the muscular texture into fatty substance.—Several observations, and particularly those of Haller and Vicq d'-Azyr, testify the conversion of the muscular texture into fat, in the extremities. Modern anatomists, we are informed, have discovered the same degeneration in the muscular substance of the heart, though such an occurrence has not come under our author's immediate observation. The heart is often found enveloped in an immense coating of fat; but these cases are quite different.

The third class of organic affections of the heart, comprehends those of the tendinous or fibrous structure; as contraction, thickening, induration, and ossification of the valves, straitening the orifices of the cavities of the heart, and of the large vessels connected with it. Besides the more common examples of these, Corvisart has met with some cases of what he calls vegetations of the valves; certain soft irregular excrescences, resembling some venereal crested and cauliflowered-like tumors, and which, when met with, attached to the valves of the heart, he seems to have some suspicion might have proceeded from a syphilitic taint.

The following is the description of one of these:—The greater part of the mitral valve, which is opposite to the aortic orifice, was not attached by tendinous filaments to the columnæ carneæ; and at its floating and detached edge, were suspended several kinds of irregular long vegetations, much resembling certain venereal excrescences. These seemed to be particular degenerations of the tendinous filaments, detached from the columnæ car-

neæ. A similar vegetation was observed on one of the semilunar valves; and about an inch square of the left part of the auricle, close to the ventricular orifice, was granulated, rough to the touch, and resembled somewhat in its appearance the degeneration of the valves. In examining the sexual organs, the cicatrix of pretty large chancres was observed on the glans penis.

The symptoms by which induration, ossification, or degeneration of the valves of the right side of the heart may be known, are more obscure than those which occur in similar obstructions of the left orifices: and in both cases, the symptoms are generally complicated with those of aneurisms of the heart, the common consequence of those obstructions at the auricular and ventricular orifices.

The increase of symptoms, however, may enable us to distinguish contractions of the right orifices; the bloated appearance of the face; the signs of venous congestion, and particularly in the liver; the oppression of the breathing, with all the ordinary symptoms of dilatation of the right side of the heart, occurring with a more irregular pulse than is common in uncomplicated dilatation, render it highly probable, that the right orifices are contracted.

When the aortic orifice is obstructed by ossification, or other disease of the semilunar valves, the pulse is never very full or regular. This constant irregularity, often increased by the frequency and force of the palpitations, will always, he thinks, be sufficient, when taken along with the other symptoms of diseased heart, to distinguish with precision the altered state of the valves.

Under the fourth class, or affections of different structures of the heart, are arranged several cases and observations on carditis; on rupture of the heart; on rupture of the columnæ carneæ, and valvular tendons; on tumors of the heart, and other preternatural structures of the organ; and on suppuration, ulceration, and gangrene, as terminations of carditis.

These observations are rather desultory, not very instructive, and do not admit of abridgement.

The fifth class comprehends aneurisms of the aorta, which he continues, notwithstanding the observations of Scarpa, to consider as of two kinds: the true, in which all the coats of the artery are dilated, and the false, which he deems the more rare of the two, in which one of the coats is broken or torn, and the cellular alone dilated. The formation of the latter species of aneurism, he thinks far from being satisfactorily explained; and from some observations he has made, he is disposed to question the common opinion, commonly held on this subject, that the aneurismal tumor, formed by the cellular coat, is occasioned di-

rectly by a breach in the other arterial coats, and consequent effusion of blood into the external covering of the artery. In dissecting the body of a man at the Hôpital de la Charité, he observed, on the curvature of the aorta, a small tumor of the size of a nut, which he at first took for an enlarged bronchial gland. It was covered by a firm membrane, and on examination turned out to be a fibrous cyst, adhering intimately by its base to the aorta, and containing a substance of a deep red colour, of the consistence of suet, very similar to the old coagulated blood which adheres to the interior parietes of the aneurismal sacs.

He consequently suspected that this cyst communicated with the cavity of the aorta; but no such communication, he says, could be found; yet, on the opening of the aorta, he observed a greyish livid spot, which corresponded to the basis of the cyst. Prosecuting the dissection, he found another similar tumor, just above the trunk of the cæliac artery; and in another subject he met with two or three such tumors in the course of the aorta, and one or two more in the iliac arteries. Now, the appearances of this tumor on the arch of the aorta, appear to us precisely such as we should expect in the early stage of aneurism, according to the theory of Scarpa; a cellular or membranous cyst, containing coagulated blood, forming a round tumor, connected with the aorta; and the livid spot observed within the aorta, and corresponding exactly to the basis of this tumor, was, we apprehend, really the small breach in its internal coats, through which the small tumor had been filled. Corvisart, however, has viewed the matter in a very different light. He is inclined, indeed, to think that these small tumors were the beginning of aneurisms; but he infers, from their appearances, that these aneurisms, far from being formed from within outwards by the dilatation of one or more of the arterial coats, are, on the contrary, formed from without, inwards, by the erosion of these coats; and that the aneurismal cyst, instead of being formed by the dilatation of any of these coats, is wholly formed by a membranous or fibrous substance, foreign to and unproduced by the artery.

We are not authorized to deny the existence of true aneurism of the aorta, aneurism in which all the coats of the artery are dilated, so as to form the aneurismal tumor; but it is clear to us, that the notions of our author on this subject are far from deserving praise, and that almost all the cases he has related as examples of true aneurism, were in truth similar to all we have seen, and which bore ample testimony to the accuracy of Scarpa's observations, and to the truth of his pathology.

The last division of this essay is entitled Corollaries, and contains many important observations on the causes, symptoms, pro-

gress, prognostics, and treatment of organic diseases of the heart in general.

The symptoms to which these, in different cases, give rise, are related at considerable length, as they appear in all the functions of the body. Without following our author throughout, we shall conclude this imperfect sketch of his essay, with extracting a few of his observations on the state of the circulation.

In applying the hand over the region of the heart, we perceive a succession of unnatural contractions and dilatations of that organ. In active aneurisms, its pulsations are frequent, strong, vigorous, regular, and vibratory, and they strike the hand with violence and hardness. In passive dilatations, its pulsations are softer and slower. In the case of contraction of its orifices from induration or ossification of their valves, the pulsations are irregular, sometimes stronger, sometimes weaker, almost always intermittent, attended with undulations, noise, and jarrings, of which it is impossible to describe all the varieties: when the muscular substance of the heart is degenerated into fatty or osseous matter, its pulsations are weak, slow, and generally almost insensible.

The pulse gives similar indications. In active aneurism it is strong, hard, and vibratory; in passive aneurism, weak and soft; and in ossification or induration of the valves, it is unequal, and irregular. If these inequalities and irregularities be connected with frequent and inordinate force of the pulse, there is good reason to suspect the coexistence of active aneurism, with a contracted state of one of the orifices; on the contrary, if the pulse be at once irregular, soft, and weak, there is probably a complication of passive aneurism, and valvular obstruction. If to these different signs we take into consideration the appearance of the countenance, the dyspnœa, the cough, the suffocation remarked in walking or in ascending heights, the disturbed sleep and sudden wakenings, the dropsical occurrences, &c. we possess an abridged but faithful outline of the general and particular symptoms of the principal diseases of the heart.

"The pulse is strong, hard, vibrating, almost always frequent and regular, in uncomplicated active aneurisms of the heart; soft, slow, and at times frequent, regular, and compressible, in simple passive aneurisms; irregular, unequal, undulatory, in all cases of permanent obstruction of the orifices of the heart; intermittent and irregular, by intervals only, when momentary obstruction is produced by vegetations or mobile concretions, or other analogous alterations; feeble and scarcely perceptible in indurations, ossifications, softness, or other degenerations of the muscular texture of the heart; quick, abrupt, almost convulsive, and impossible to describe, in the case of rupture of one or more of the fleshy fasciculi."

III.

Dissertatio Inauguralis de Effectibus Arsenici in Varios Organismos, necnon de indiciis quibusdam veneficii ab Arsenico illati; Quam præside, C. F Kielmayer publicè defendet, Jan. 1808. Auctor GEORG. FRIED. JAEGER, Stuttgardianus. pp. 78. 8vo. Tubingæ.

WE have not seen the original of this inaugural dissertation; but a very full analysis of it has been inserted in Gehlen's Chemical and Physical Journal, by Dr Siegwart, which contains several original observations, worthy of being generally known.

Dr Jaeger has examined the effects of arsenic on all classes of living organized bodies, vegetable and animal, and had an opportunity of observing its effects upon a girl twelve years of age, who was poisoned by drinking water which had stood upon the black oxide of arsenic (*cobaltum officinarum.*)

Most of his experiments were made with a solution of white oxide of arsenic in water, in the proportion of one to sixteen, or with a solution of arsenic acid, in the proportion of one to four. The latter, diluted with water, operated upon all organic bodies in the same manner as the former, but more quickly and obviously.

The general conclusions which he has drawn from his experiments on the vegetable kingdom are, that arsenic is a general and pretty quick poison for plants at every period of their life, with the exception, perhaps, of a few of the simplest forms of vegetable existence; that their death was induced by means of the gradual absorption and distribution of the poison by the vessels and cellular membrane, so that the parts died in succession, as the particles of the poison reached them; that the changes which took place in the poisoned plants, were the consequence of the chemical action of the poison, and that the irritability (of the mimosa) seemed to be exhausted before general death destroyed the whole machine.

The author found arsenic also to be a quick and destructive poison to animals, when applied in sufficient doses, and to a proper organ. The death was preceded, in every instance, from the infusory animalcula up to man, by inordinate motions; and the secretion of lymph was increased most remarkably from the mucous membranes. Frequent fluid stools took place in all classes of animals; in those in which mucus is secreted on the surface, it was remarkably increased, and crabs ejected a great deal of froth from the bronchial openings. The power of volun-

tary motion and susceptibility for external stimuli decreased, as well as for the stimulus of galvanism, after death; the respiration of those animals which breathe by lungs, became difficult and laborious, and warm-blooded animals experienced extraordinary thirst. In birds and mammalia, frequent and violent vomiting took place, and commonly was the commencement of the scene to which convulsions put an end. Rabbits, however, which ruminate, did not vomit. In other respects, our author did not discover any difference either in the mammalia or birds, between those which lived on animal or on vegetable food. Dogs and cats gave the first indication of their uneasiness, by a change in their voice; but the girl already mentioned made no complaint of pain, not even when she was asked about it. She retained her senses to the last, knew the persons around her, and inquired for what she wanted.

Arsenic exerted the most powerful effects, when it was injected into the veins, or applied to a bleeding wound, next, when it was introduced into the stomach, but less so when injected into the large intestines, which have fewer absorbing vessels. Applied to the sound skin, and to a wounded muscle, if dry, it seldom produced any effect; and animals covered with scales or shells, did not suffer at all from the external application of arsenic. Applied directly to the nerves, it was inert. Lastly, he found that animals were never killed more certainly or quickly by arsenic than when it was injected into the abdomen. But upon this he lays no stress, as the same effects were produced by most infusions. Younger and smaller animals died sooner than such as were older and larger. Birds, notwithstanding their more irritable nature, were less sensible to its effects than amphibia. A female frog, during copulation, when the irritability is greatly increased, was insensible to a dose which killed it at another time. Tadpoles died sooner than frogs, but the larvæ of flies were less susceptible than the perfect insect.

In whatever way the arsenic was applied, Dr Jaeger observed after death no change upon the skin, except the paleness, and some blue spots nine hours after the death, upon the girl already mentioned. The gullet, and, in birds, also crop, exhibited generally a slight redness, then further down purple-red stripes, more numerous in the vicinity of the cardia, which, as well as the stomach itself, in animals having a soft villous coat to their stomachs, was sometimes of an uniform purple-red colour, and sometimes spotted with it, without any difference from the mode of applying or form of the poison; but the muscular stomach of graminivorous birds showed no appearance of redness, and in the aponeurotic portion of the stomach of a horse poisoned by ar-

senic, there were no traces of inflammation, which was otherwise general. The villous coat of the stomach is almost always softened, and as if macerated, and also somewhat swollen, and in general it can be easily torn or rubbed off in pieces with the finger from the coat beneath it. The inflammatory redness is not seated in the villous coat, which remains perfectly white, but in what is called the nervous coat, which is remarkably red, and exhibits everywhere purple-red warts or eminences; but the author often saw this separation of the villous from the nervous coat, without any inflammatory redness of the latter. These changes continue, though in a less degree, through the small to the vicinity of the large intestines, which is in general free from them, and only contains an increased quantity of effused mucus; but the rectum again is inflamed, and its inner coat swollen and softened. These appearances are not constant, and are very various in degree. Thus, our author discovered no traces of inflammation in the stomach or intestines of a bird, and a rabbit, to which arsenic was administered by the mouth, or of another rabbit, into whose abdomen it was injected.

The other mucous membranes were less generally affected; but our author sometimes found the trachea red and inflamed, and in one instance, the urethra of a dog. The serous membranes, which receive less blood and more lymphatic vessels, are little changed. Our author never observed real inflammation of the peritonæum; but the vessels, and especially the veins of that part of it which surround the intestines, mesentery, and omentum, were always turgid with stagnating blood.

The voluntary muscles were constantly and universally rigid; the limbs sometimes bent, but generally extended; the heart, urinary bladder, gall bladder, and intestines were rarely contracted, but frequently distended by their contents.

The coats of the blood-vessels scarcely exhibited any change. But the veins, especially of the abdomen, were constantly turgid with much black fluid blood, generally mixed with some flocculi. A similar stagnation is observed in the cavities of the heart, especially of the right side, and coagula are very seldom found in them. Sometimes the lungs are also filled with extravasated fluid, but in general they are perfectly natural. In no other place was extravasated blood observed by our author, but the veins were everywhere full of black fluid blood. In the brain and nerves, there was nothing unnatural, nor in the various absorbent and secreting organs.

The putrefaction of animals seemed neither to be hastened nor retarded by their being poisoned with arsenic, whether they were buried or not. The generation of infusory animals, the produc-

tion of larvæ and subterraneous vegetation in and about the bodies of poisoned animals, took place as usual. Our author is particular in these observations, because accelerated and retarded putrefaction have been alternately enumerated among the proofs of death by arsenic. However, it may be remarked, that the immediate contact of the arsenical solution, seemed in some degree to retard the putrefaction of the part to which it was applied in sufficient quantity.

Arsenic acid produced exactly similar effects, and in a greater degree.

So much for the *general* effects of arsenic; the following *local* effects were also noted. The green colour of the skin of a salamander was destroyed. The sound skin was seldom at all affected by it. When the arsenic was applied to the wounded skin, it was never observed after death to be gangrenous or inflamed, was rarely swelled, was generally pale, and for a considerable extent the subcutaneous cellular membrane was filled with much stagnant gelatinous fluid. The œsophagus, stomach, and intestines were commonly, though not always, inflamed when arsenic was administered by the mouth. In the girl already noticed, there was only a slight spotted redness about the cardia, a discolouration of the bottom of the stomach, and a very small brown spot where the villous coat seemed as if superficially burnt. Our author never observed real erosions, ulcerations, and gangrene of the viscera. The peritonæum was not inflamed in those animals which were killed by injecting an arsenical solution into the abdomen. The local application of arsenic generally rendered the muscles white, but seldom inflamed, and caused an increased secretion of serous fluid into the spaces between them. The nerves were not affected, and the blood-vessels very little. In the horse already mentioned, and into whose jugular vein two or three ounces of arsenical solution were injected, and which was put to death twenty-nine hours afterwards, there were only some discoloured spots in the left ventricle. When blood was received into an arsenical resolution, the whole mass became black and gelatinous in appearance; then a coagulum formed in the centre; but it remained soft, and not defined, and never acquired the bright red colour on the surface.

We shall not enter into the detail of our author's reasons for his opinion concerning the manner in which arsenic acts. He adduces arguments to prove, that arsenic does not act mechanically by the sharpness of its particles, nor by its local action on the stomach, nor in the manner of the acrid poisons or dephlogisticating substances, nor upon the nervous system; but is ana-

logous to the poison of the viper and ticunas, which act primarily upon the blood.

We shall, however, extract more fully the observations of our author on the proofs of poisoning by arsenic. These are of two kinds;—the pathological proofs derived from the symptoms which precede death, with the appearances of the body after death; and chemical proofs derived from the properties of arsenic.

With regard to the first, he thinks it sufficient to mention, that not only several of them are often common in other diseases, and that there is almost none of them which has not occasionally been wanting, and that even several of them have been wanting at the same time. Hence these signs, collectively, only render the poisoning by arsenic, and the death from that cause, probable; certainty cannot be obtained but from the chemical proofs.

The chemical proofs consist either in separating the arsenic from the matters mixed with it, so that it can be recognized by its physical properties, or in subjecting it to the action of re-agents, which form compounds, distinguished by particular characters. Among the re-agents used for the detection of arsenic, our author thinks that the preference is due to lime-water, ammoniaret of copper, and hydro-sulphuretted water.

Lime-water must be used recently prepared, and hot. Our author found that it was sufficiently delicate to precipitate 1-30th of a grain of arsenic when dissolved in 100 grains of water, or 1-40th in 50 grains.

A saturated solution of ammoniaret of copper, is a much more delicate test; for it strikes an evident green colour with a solution of white oxide of arsenic, which contains but 1-500dth of a grain dissolved in 50 grains of water.

"The precaution," he however adds, "which Rose discovered in regard to this re-agent, when added to fluids containing tannin, I found to be perfectly necessary and well founded; for although an infusion of tea did not in my experiments prevent the usual reaction of a dilute solution of arsenic, on ammoniareted copper, as Rose imagines, † I could not obtain any reaction of ammoniareted copper, upon the decoction of the herbs found in the stomach of a rabbit poisoned by arsenic, although other experiments indicated sufficiently the presence of the arsenic."

Water saturated with sulphuretted hydrogen, formed by the action of diluted muriatic acid on sulphuretted iron, is also a very delicate re-agent. Our author found it capable of detecting,

† Gehlen observes, in a foot-note, that this difference of observation probably depended on the difference of astringency in the kinds of tea employed; for otherwise he found the phenomenon to be certain.

by producing an obvious yellow colour, arsenic in a solution which contained only 1-1000th part of a grain of absolute weight, and in which it bore the proportion to the water only of one to 50,000 or 60,000. The small proportion of muriatic acid, which this hydro-sulphuretted water always contains, does not seem to injure its delicacy, when the gas is prepared with a moderate heat; but it must always be fresh, lest it lose its strength by keeping.

Our author now proceeds to the other method of analysis, by separating the arsenic from the substances with which it is mixed, so as to recognize it by its physical properties. The most common is the converting the arsenic into vapour, by laying it on red coals or on copper heated to a dull red. In this way our author was sensible of the garlic smell, of the tenth of a grain mixed with sugar; but he observes, that it is a very insufficient test, as it depends upon the accuracy of smell of the experimenter; and, besides, phosphorus and zinc emit a similar odour. But, by collecting the vapours, so that the arsenic assumes its metalic state, we have an absolutely certain test. In this way, Rose asserts that he was able to detect the one-eighth of a grain of arsenic mixed with animal matters; and our author obtained a very evident sublimate from the stomach and duodenum of a rabit, poisoned with two grains, and also from the inner coat of the stomach and its contents, of the girl already mentioned, who was poisoned by swallowing a small quantity of black oxide of arsenic. As an additional method of obtaining arsenic in its metallic form, our author proposes, in consequence of Davy's discoveries, the use of the galvanic pile.

This section is concluded by a comparison of the advantages of the methods proposed by Hahnemann and Rose for the detection of arsenic; but as we have not been able to procure an exact detail of these methods, it is not very intelligible. The following extract from a note by Gehlen, gives, however, some account of the latter.

"It was by no means Rose's meaning to confine the proof to the obtaining arsenic by sublimation, but he considered it as absolutely necessary, when no arsenic in substance was found, because the analysis of the suspected substance, or of the fluid obtained from it by re-agents, without the proper precautions prescribed by him, is, upon the grounds stated by him, very uncertain. An accident, which might render the sublimation abortive, such as the breaking of the vessel, might also happen in the other methods, and destroy the materials; and in this case, with Rose's procedure, we had previously obtained three tests;—the precipitation with lime-water; the garlic smell by heating a small quantity of the precipitate upon charcoal with the blow-pipe; and the analysis of a part of the fluid boiled with nitric

acid,* and neutralized on purpose with water saturated with sulphuretted hydrogen. For the ammoniaret of copper, which is almost always inapplicable where there are animal fluids, becomes in this case absolutely so, on account of the formation of the yellow bitter principle, which it also precipitates."

Our readers will have perceived, that this dissertation is of considerable value, and will perhaps sympathize with the regret which we feel, that we have not been able to procure the original. Although too much of it seems to be devoted to a theoretical consideration of the manner in which arsenic acts upon living bodies as a poison, yet it seems to contain much useful information upon two important practical points; the symptoms produced by arsenic in various classes of animals, and the means of detecting it by analysis.

Every person who has become interested in either of these subjects, must have discovered, with regret, how imperfect our knowledge of them is, and how very difficult it is to obtain or increase it. Systematic writers upon poisons, have jumbled together the smptoms of various doses operating under different circumstances, without discriminating the constant effects, if there be any, from the common or usual effects; nay, they have drawn their descriptions of the effects of poisons, not only from different poisons of the same class, but even from poisons of different classes, and from their effects upon animals of different classes. Poison must still be studied in the way of induction. We must collect all the special facts and observations; we must compare and generalize them, and proceed no farther in our general inferences than these facts warrant.

Hahnemann, who has written a book upon arsenic, has adopted a classification of poisoning, by means of it, into three degrees. When death follows the exhibition of the poison within twenty-four hours, it constitutes the first degree; and when later than twenty-four hours, the second degree; and when the case, though attended with dangerous symptoms, does not terminate fatally, it belongs to the third class.

Adopting, then, this division of Hahnemann, as being at least useful, we shall attempt a description of the effects of arsenic upon the human body, from a careful comparison of all the cases which have occurred to us in the course of our reading.

In the slightest case in which the operation of arsenic is recorded as producing poisonous effects, the symptoms are uneasiness at the præcordia, and a sense of heat there. These symptoms are worthy of notice, not so much as a character of poison-

* Rose seems to employ nitric acid for destroying the animal matter with which the arsenic is mixed.

ing, as, in the practice of medicine, on account of their giving us a very significant warning when we are trying arsenic as a remedy, that we have pushed it to the utmost that any prudent practitioner would venture upon. Where the dose of poison is somewhat greater, but not sufficient to produce death, violent vomiting is commonly the first symptom; although, in some instances, it is preceded by a sense of heat in the tongue and throat; in other cases, these sensations are expressly mentioned as not felt in the whole course of the disease. In these cases, when the vomiting is instant, and the poison has been taken on a full stomach, the patient seems to owe his escape to the poison being discharged before it has time to act. The next symptom which claims our attention is the purging, sometimes of blood; but purging occurs less frequently in this slight degree of poisoning than in the more severe cases. In the region of the stomach and bowels, pain is frequently felt; but it is often rather an insupportable uneasiness and oppression than pain properly so called. The stomach is not described as swelling; and in one case, where there was hiccup, eructation, and difficulty of breathing, it is expressly mentioned, that it was not tense or swelled.

A sensation of coldness, especially in the extremities, and cold sweat, seems to have been almost always present, with general paleness, and paleness of the countenance, in some cases languor, faintishness, and a tendency to sleep. In this degree of poisoning, convulsions are not frequently observed, and the thirst and fever seem to arise from irritation in some persons, as they are seldom expressed. In one case only, is *ardor urinæ* mentioned.

In the second degree of poisoning from arsenic, where the patient lives above a day or two, the first complaints are heat and thirst, or vomiting, or inexpressible distress; the first is less frequently observed than the other two. In one case, of an infant killed by orpiment, the matter vomited is described as viscid and colourless. Purging is not mentioned in any of the cases of this set; but in one a fetid stool was procured by a pessary, and in one gripes are noticed; in two the belly swelled; in one there was great feebleness and lassitude; and in all, convulsions seemed to have taken place, in one case impeding deglutition. In three of the cases, the body is mentioned as having been discoloured, or marked with livid spots; in one even blistered, and one was highly fetid. Two only were examined internally. In one, the intestines were inflated, and the intestines and stomach red with turgid vessels; in the other, the fauces and stomach were yellow, and the heart, spleen, and lungs, dark blue. The cases of this class are too few to afford any accurate inferences; besides, from the length of time, there is greater opportunity for

the cooperation of other causes, whether previously existing disease, or the action of remedies.

In the third degree of poisoning by arsenic, where death takes place in a few hours, the symptoms succeed each other rapidly, or begin at the same time; the fainting and general debility almost precede the vomiting; the vomiting occurred in all the cases but two; purging or gripes in most of the cases; the matter passed by stool is in one case described as green, watery, and viscid. In one case, there was vertigo, also general pains, and loss of speech. Convulsions did not occur often; but there was sometimes hiccup. In a few cases, there was much heat and thirst; even in one, in which (a symptom more frequent than heat) there were complaints of a sensation of intense cold and paralysis of the extremities, with cold sweat. The pulse, in the only case in which it is mentioned, was slow and languid; and death seems to have generally proceeded from exhaustion and rapid sinking of the vital powers. In none of these violent cases, is there any mention of delirium, or affection of the mind, except in one in which the poison was applied externally to the head.

The external appearance of the body after death is not uniform. In some cases, it was swelled or livid; in others, natural. The stomach in almost every instance is inflamed, abraded, or even eroded; sometimes distended, and at others corrugated. Next to the stomach and intestines, the lungs seem most frequently affected; as in almost every case in which the thorax appears to have been opened, they are described as livid, or having livid spots on their surface. In one case, they are inflated; and in another, flaccid. The liver is only mentioned in one case as grey, and the heart in another as flaccid. The blood seems to have differed very considerably; at one time being black and coagulated; at another, black and fluid; and at a third, florid and fluid.

In many of the cases, the remains of the poison are actually found in the stomach, generally adhering to the inflamed points, to which it is probably fixed by coagulating the glairy fluid lining the stomach.

IV.

Nouvelles Expériences sur les Contre-Poisons de l'Arsenic. Par Casimir Renault, Médecin, Membre-correspondant des Sociétés Académique des Sciences, Médicale d'Emulation et d'Instruction. A Paris, an IX. pp. 119.

This work, upon another branch of the same subject, has only fallen lately into our hands. It is also worthy of perusal, and is in a great measure founded on actual experiments made by the author.

He commences with some general considerations on counter-poisons. All gastric poisons may be arranged into two classes, into corrosive and narcotic poisons. The action of the latter may be interrupted by a strong reaction of the vital forces; that of the former only by a change in their nature, which cannot be effected on the mineral poisons of this class but by chemical re-agents capable of converting them into innocuous substances. Taking arsenic as an example, M. Renault is of opinion, that only those re-agents can be considered as antidotes to it which fulfil the following conditions.

1. Which may be taken in large doses without any danger.
2. Which are soluble in water and the animal fluids.
3. Which act upon the poison, whether in a fluid or in a solid state, at a temperature inferior to that of the human body.
4. Whose action is speedy.
5. Which are capable of combining with the arsenious acid in the midst of the juices and contents of the stomach.
6. And which, in acting upon the poison, deprive it of all its deleterious qualities.

We shall pass over our author's chemical critique on Navier's directions for preparing his celebrated martial hepar, and proceed to his own experiments, which were all made upon dogs, with every precaution to render them as little complicated as possible. He had to overcome the difficulty of forcing the dogs to swallow the fluid, and to retain it after it was swallowed. The first object he accomplished satisfactorily, by keeping the dog's mouth open by a piece of stick placed between the grinders, and injecting the fluids through a tube of elastic gum, introduced into the stomach; but the second was only imperfectly effected, by his never leaving the subject of experiment a moment, and forcibly keeping the muzzle closed by strong compression with the hands, as soon as the precursory signs of vomiting appeared.

His first experiments were made to ascertain the powers of sulphuret of potass, which is generally considered as the most powerful antidote of arsenic. Upon mixing solutions of these substances they instantly become turbid, and afterwards deposit a yellow precipitate. This mixture, after diffusing the precipitate through it, he injected into the stomach, and, in one instance, he used the precipitate diffused in water; but neither the sulphuret of potass nor that of lime seemed to retard or diminish the deleterious effects of arsenic. Vomiting, purging, moaning, and prostration of strength, were the almost invariable harbingers of death. On dissection, the stomach was found to be inflamed or livid, generally filled with a glairy fluid like white of egg, often interspersed with flocculi like coagulated albumen, and its surface was sometimes lined with a consistent pseudo-membrane of the same nature.

Water impregnated with sulphuretted hydrogen was next employed, and with some success. A single grain of arsenic is sufficient to kill the strongest dog; and yet, in ten instances, our author gave it in solution, in one to the extent of even ten grains without proving fatal, even although the arsenical solution was given some minutes before the hydrosulphuret. It only remained then to try its effect against arsenic in substance; and here it most unfortunately failed completely; as, in almost every instance of poisoning, the arsenic is used in substance.

M. Renault has examined whether arsenic in its metallic state be a poison. Some experiments of Bayen and Sage seemed to prove the negative; but they were not conclusive. As it is almost impossible to reduce arsenic to powder without its becoming oxidized, our author had recourse to its alloys for deciding the question; and he found that mispickel, given to the extent of two drachms, had scarcely any effect; which accords with the conclusion drawn by Bayen in his work on tin, and proves that the arsenic which may be contained in that metal need give no uneasiness, as it is in its metallic state.

The black oxide of arsenic is, however, a deadly poison, and it has the singular property, that when it acts sufficiently, it produces in the stomach an exudation of blood, and infiltration of the same between the coats of that viscus, without any trace of erosion. A dark grey pulverulent substance, sold publicly in France under the names of *poudre aux mouches*, *mort aux mouches*, *cobalt testacé*, is in fact the black oxide of arsenic, and produces exactly the same effects. Our author therefore contends, and properly, that its sale should be subjected to the same restrictions as the white oxide and sulphurets of arsenic.

The native sulphurets, both red and yellow, were given in large doses to dogs without producing any severe effects; the artificial sulphuret was poisonous even in a small dose. M. Renault thinks that this remarkable difference of effect is owing to the arsenic being oxidized in the latter compound, and in its metallic state in the former.

The salutary effects of vomiting, so often apparent in M. Renault's experiments, have led him into a digression upon the mechanical causes of vomiting, and from thence to some practical inferences concerning the treatment in cases of poisoning. Having proved the inefficacy of all antidotes, M. Renault places his only hopes in exciting speedy and full vomiting; and as a full stomach has been found by experience to diminish and counteract the effects of poison, and is highly favourable to vomiting, he advises the gorging of it with mucilaginous and gelatinous liquors, such as linseed tea, milk, broths, or even with warm water. As vomiting, however, is certainly the chief means of saving a person who is poisoned, and as it does not always take place immediately, our author has proposed a method of washing out and emptying the stomach mechanically, by means of a large tube of elastic gum and a syringe. We shall give the particulars in his own words.

"The tube should be long enough to have one of its ends, which should have two orifices, inserted into the lowest part of the stomach, and of a diameter large enough to permit the passage of the half-digested substances which may be in it. At its upper end it should have a brass cup adapted to the extremity of a syringe. The tube is to be introduced through the mouth or nostrils, and the syringe fitted to it. We are now to throw gently into the stomach a certain quantity of liquid to dilute, suspend, or dissolve the poison. We then draw back the piston, and suck up a certain quantity of the contents of the stomach. By repeating these two operations several times, this viscus will be well washed, and the poison extracted from it without effort, almost without pain, and in a very short time. Provided the poison have not passed the pylorus, the possibility of extracting it in the method I propose, will be evident to all who have any knowledge of mechanical philosophy. When its efficacy shall have been established by trials on the human body, its use may become very extended. Until experience shall have decided this, I have made some trials on living animals. I have injected to the extent of eight ounces of water into the stomach of several small dogs, and have been able to pump it entirely out by the procedure I have described. Indeed it could not be otherwise, when we consider with what success similar means are used for emptying the bladder of coagulated blood."

In the after treatment, our author judiciously recommends bland nutritive fluids as preferable to all reputed antidotes, which

are uniformly more or less irritating. In the same manner, to remedy the debility occasioned by the poison, we must trust to a proper diet and time.

Our author now proceeds to the very important discussion of the proofs of death by arsenic; and although caution be highly commendable, and indeed indispensable on the part of a professional man called upon to report, still we think that scepticism may be carried too far. It is perfectly true that no single symptom, or, perhaps, no train of symptoms is the uniform and peculiar effect of arsenic; and we may grant that the same uncertainty exists with regard to the appearances which may be discovered on the body after death. But in addition to the cases of this nature already on record, our author has related one on the authority of Prof. Chaussier, in which a man swallowed arsenic in large pieces. The only symptoms produced were slight syncopes on the approach of death. On opening the body, the arsenic was found almost in the same state in which he had swallowed it; and it was not possible to discover the least appearance of erosion or inflammation. Now in this case there was surely no uncertainty; but it will be said, that if no arsenic had been found in the stomach, then there would have been no proof. True; but if no arsenic had been contained in the stomach, then the death would in all probability have been preceded by more violent symptoms, and its effects would have appeared upon the stomach. It was the largeness of the dose which, as it were, extinguished life suddenly, and precluded all reaction. In the same manner, the case here cited upon the authority of M. Dupuytren, to prove that erosion of the stomach may take place where no corrosive poison has been swallowed, is perfectly inconclusive. The body of a woman was opened. There was a hole in the large extremity of the stomach several centimetres in circumference, through which a small quantity of a reddish fluid had escaped into the abdomen in the vicinity of the spleen. The edges of this hole were thin and even; there was no inflammation except on the parts of the stomach and liver next to the cardiac orifice. But M. Dupuytren knew nothing of the history of this case;—what proofs have we, then, that this woman was not poisoned? It is stated that she had been recently delivered; there were marks of blisters on the legs, and one of the veins of the foot had been opened. Besides, M. Dupuytren could not detect poison by chemical analysis in the contents of the stomach or abdomen. But all these taken together do not amount to the lowest degree of proof that the appearances on the stomach were not produced by corrosive poison. And it may be fairly remarked, that if, in Paris, where bodies are dissected by thousands, no less doubtful proof could

be found, that erosions of the stomach sometimes happen independently of poison, it almost affords a presumption that they are only caused by poison. Be that as it may, there generally exist in cases of suspected poisoning, some proofs affirmative or negative of the suspicion, if we have skill to discover them. We admit it to be difficult; but to say that it is impossible to discover them, is injurious, as it encourages carelessness and indolence, and obstructs the progress of science. We have, however, less objections to our author's conclusion than to his arguments in support of it.

"From all this I conclude, that except in a very small number of cases, the examination of the body cannot furnish all the data necessary to pronounce judgment in cases of poisoning from arsenic or its compounds; and that, united to a knowledge of the symptoms preceding death, it may afford strong presumptions, but rarely amounting to the degree of certainty necessary to pronounce an affirmative or negative decision."

M. Renault, lastly, treats of the effects of arsenic applied externally. His experiments were again made upon dogs. When the skin was sound, it excited a pustular eruption without inflammation; but, when the skin was broken, more serious effects followed, both general and local, and sometimes death.

V.

A Catalogue of Indian Medicinal Plants and Drugs, with their Names in the Hindústani and Sanscrit Languages. By JOHN FLEMING, Esq. M. D. Asiatic Researches, Vol. XI. 4to. Calcutta.

THIS is a most valuable treatise, coming from the high authority of the head of the Medical Board in Bengal. It may be considered as the official Materia Medica of our eastern colonies. It is, we are informed, intended chiefly for the use of gentlemen of the medical profession, on their first arrival in India, to whom it must be desirable to know what articles the country affords, and by what names he may find them. The systematic names of the plants are taken from Willdenow, with the exception of some new species, not included in his work, whose specific characters are given from the manuscript of Dr Roxburgh. Their names are given in the scientific language of Europe, and in the Sanscrit and Hindustani.

For the virtues and uses of such medicinal vegetables and drugs as are already well known in Europe, we are referred to the Apparatus Medicaminum of Murray, and Woodville's Medical Botany; but a concise and very valuable account of the qualities of those articles only known in India is added.

The first list contains the medicinal plants which are indigenous or cultivated in Bengal, and the second the drugs which are imported from neighbouring countries.

We shall briefly run over the information contained in the notes.

Abrus precatorius, root—a substitute for liquorice.

Acacia Arabica, gum,—a substitute for gum-arabic. Bark powerfully astringent.

Andropogon Schœnanthus—juncus odoratus of the old pharmacopœias.

"The Hindu practitioners consider the infusion of the leaves as sudorific, diuretic, and emmenagogue. Whatever title it may have to these virtues, it is at least a very agreeable diluent; and, on account of its fragrant smell, aromatic flavour, and warm, bitterish, but not unpleasant taste, is generally found to be a drink very grateful to the stomach in sickness. Many Europeans, with whom tea does not agree, use, instead of it, the infusion of this plant, to which they have given the name of lemon-grass."

Anethum Sowa (Roxb.)—like anethum graveolens.

Anethum Panmorium (Roxb.)—like anethum fœniculum.

Apium Involucratum (Roxb.)—Seeds agreeably aromatic, used as a condiment.

Aristolochia Indica—An aromatic bitter, supposed by the Hindus to possess emmenagogue and artiarthritic virtues.

Asclepias asthmatica.

"I have inserted," says Dr Fleming, "this plant on the authority of the following note, which was found among the late Dr Kœnig's papers, and communicated to me by Dr Roxburgh:—'Dr Patrick Russell was informed by the physician-general at Madras, that he had, many years before, known it (the root of the asclepias vomitoria) used, both by the European and native troops, with great success, in the dysentery, which happened at that time to be epidemic in camp. The store of ipecacuanha had, it seems, been wholly expended; and Dr Anderson, finding the practice of the black doctors much more successful than his own, was not ashamed to take instruction from them, which he pursued with good success; and collecting a quantity of the plant which they pointed out to him, he sent a large package of the roots to Madras. It is certainly an article of the materia medica highly deserving attention.'

"I have not obtained any further account of the medicinal virtues of this species of asclepias, which grows in the Northern Circars, but is not met with in Bengal. It is, however, as Dr Kœnig observes, an article

highly deſerving attention. The ipecacuanha root is one of the few medicines for which we have not as yet found any adequate ſubſtitute in India; and, if ſuch a ſubſtitute ſhould be found in the root of the aſclepias aſthmatica, it would prove a moſt valuable acquiſition to our Materia Medica."

Boswellia thurifera (Roxb.)—furnishes the gum-resin, called olibanum.

"That naturaliſts ſhould have remained in ignorance or in error, until almoſt the preſent day, reſpecting the tree which yields a ſubſtance ſo long known, and ſo univerſally uſed, muſt appear not a little ſurpriſing. Such, however, is the fact; and the merit of having diſcovered the true origin of this celebrated inceuſe, is due to Mr Colebrooke, who has aſcertained and proved, moſt ſatisfactorily, that the olibanum, or frankincenſe of the antients, is not the gum-reſin of the juniperus lycia, as was generally ſuppoſed, but the produce of our Boſwellia thurifera. See his paper on this ſubject in the Aſiatic Reſearches, Vol. IX. p. 377; to which is ſubjoined a botanical deſcription of the tree, by Dr Roxburgh.

"Although the olibanum is ſtill retained in the pharmacopœias of the three Britiſh Colleges, it is ſeldom uſed as a medicine in modern practice. Formerly, however, it was held in conſiderable eſtimation as a remedy in catarrh and hæmoptyſis; and as it is leſs heating than myrrh, by which it has been ſuperseded in theſe diſeaſes, it might ſtill, perhaps, be uſed with advantage in ſome caſes, in which the myrrh might prove too ſtimulant."

Cæsalpinia Bonducella.

"This ſhrub is a native of both the Indies; but its uſe in medicine is, I believe, known only in the East. The kernels of the ſeeds are intenſely bitter, and poſſeſs the tonic power in a very high degree. They are accordingly employed by the Hindu phyſicians in all caſes in which that power is more eſpecially required: and particularly in intermittent fevers, for which they are conſidered as an almoſt infallible remedy. The mode of uſing them, is as follows:—One of the ſeeds, freed from its hard ſhell, is beat into a paſte, with a few drops of water, and three corns of black pepper. This is formed into three pills, which are taken for a doſe; and this doſe is repeated three or four times a-day, or oftener if neceſſary. The decoction of the gentiana cherayita (Roxb.) is generally preſcribed, to be taken at the ſame time with the pills. See Gentiana Cherayita.

"This method of curing intermittents is ſo generally ſucceſsful, that it has been adopted by many European practitioners; particularly in thoſe caſes, which ſo frequently occur, in which the patients have an averſion to the Peruvian bark, or cannot retain it on the ſtomach. In all ſuch caſes, and alſo on occaſions where the Peruvian bark cannot be procured, I believe that the catcaranja will be found one of the beſt ſubſtitutes to which we can have recourſe, particularly if aſſiſted by the decoction of the cherayita; which indeed is ſo powerful an auxiliary, that it may be doubtful, in the caſe of ſucceſs, to which of the two remedies the cure ſhould be chiefly aſcribed."

Capsicum frutescens—Substitute for capsicum annuum.

Carica Papaya.

" This is not an indigenous tree of India, and conſequently has no name in the Sanscrit language. It is a native of South America and the Weſt Indies, whence it was brought by the Spaniards and Portugueſe, to the Philippines and Moluccas; and from theſe islands, being of very quick growth, it ſpread rapidly to all the other countries of India. It has long been cultivated in every quarter of Hindustan, and is in flower and fruit during the greateſt part of the year. The milky juice that flows from the fruit, when an inciſion is made into it, before it is quite ripe, is eſteemed by the inhabitants of the Iſle of France and Bourbon, as the moſt powerful vermifuge that has yet been diſcovered. An account of this remedy was tranſmitted to the Preſident of the Aſiatic Society, by Mr Charpentier Coſſigni, in a letter, dated the 3d November, 1800, of which the following is an extract.—

" Un hazard heureux a fait decouvrir à L'Iſle de la Reunion un remède le plus efficace de tous ceux connus contre les vers. Il y a pluſieurs années qu'on en fait uſage avec le plus grand ſuccès, à L'Iſle de France, ou les maladies vermineuſes ſont tres communes. C'eſt du lait de papayes. On inciſe ce fruit quand il eſt verd. Il rend un lait, qu'on recueille, et qu'on fait prendre à jeun au malade. C'eſt le plus puiſſant de tous les vermifuges. On pretend qu'il tue meme le Tænia cucurbiteux, qui eſt aſſez commun dans L'Iſle. Au reſte, les preuves de la vertu puiſſante de ce remède ſont deja tres nombreuſes, ſans qu'il ſoit reſulté d'accidens; quoiqu' on ait eſſayé de l'adminiſtrer en grande doſe. Ce qui rend ce remède precieux, c'eſt qu'une ſeule doſe ſuffit pour tuer tous les vers, quelle grande qu'en ſoit la quantité."

" The vermifuge, thus ſtrongly recommended, and on ſuch reſpectable authority, has not yet come into uſe here, either among the native or European practitioners, although an account of it was publiſhed, at the time, in the Calcutta newſpapers. A remedy, however, ſo ſimple, and ſo eaſily at all times to be procured, certainly deſerves to have a fair trial.—The doſe for an infant is one tea-ſpoonful of the juice, mixed with thrice that quantity of warm water, or cow's milk; for a child of ſix or ſeven years of age, one table-ſpoonful; and for an adult, two table-ſpoonfuls. A few hours after the patient has taken the doſe of papaya milk, a doſe of oleum ricini is given to him, to promote the expulſion of the dead worms."

Caſſia alata—ornamental ſhrub. The expreſſed juice of the leaves, mixed with common ſalt, is used externally for curing ring-worms, but often fails.

Cedrela tuna—Bark and its extract aſtringent.

Croton tiglium.

" The ſeeds of this plant were formerly well known in Europe, under the names of Grana Tiglia and Grana Molucca. They were employed as hydragogue purgatives; but, on account of the violence of their operation, they have been long baniſhed from modern practice. For the ſame reaſon, they are ſeldom uſed by the Hindu practitioners, though not unfrequently taken, as purgatives, by the poorer claſſes of the natives. One ſeed is ſuf-

ficient for a dose. It is first carefully cleared from the membranaceous parts, the rudiments of the seminal leaves, that adhere to the centre of it; by which precaution, it is found to act less roughly, and then rubbed with a little rice gruel, or taken in a bit of the plantain fruit."

Curcuma longa, et zedoaria.

"From the roots of several species of curcuma, that are found in Bengal, the natives prepare a farinaceous powder, which they call Tikhur. It is in every respect similar to the powder prepared from the root of the maranta arundinacea, or arrow-root, and is often sold for it in the Calcutta shops."

Datura metel—analogous to stramonium.

"The soporiferous and intoxicating qualities of the seeds are well known to the inhabitants; and it appears from the records of the native courts of justice, that these seeds are still employed for the same licentious and wicked purposes, as they were formerly, in the time of Acosta and Rumphius."

Eupatorium ayapana—Virtues lately exaggerated, now depreciated, perhaps unjustly.

Gentiana chirayita. (Roxb.)

"This species of gentian is indigenous in the mountainous countries to the northward of the Ganges, but does not grow in the lower parts of Bengal. The dried herb, however, is to be met with in every bazar of Hindustan, being a medicine in the highest repute with both the Hindu and European practitioners. It possesses all the stomachic, tonic, febrifuge, and antiarthritic virtues which are ascribed to the gentiana lutea, and in a greater degree than they are generally found in that root, in the state in which it comes to us from Europe. It may therefore, on every occasion, be advantageously substituted for it. The efficacy of the chirayita, when combined with the caranja nut, in curing intermittents, has been already mentioned. It is found equally powerful in exciting and strengthening the action of the stomach, and obviating flatulency, acidity, and redundancy of phlegm, in dyspœpsia and gout. For restoring the tone and activity of the moving fibre, in general debility, and in that kind of cachexy which is liable to terminate in dropsy, the chirayita will be found one of the most useful and effectual remedies which we can employ.

"The parts of the plant that are used in medicine, are the dried stalks, with pieces of the root adhering to them. A decoction of these, or, which is better, an infusion of them in hot water, is the form usually administered. Spirituous tinctures are also prepared from the plant, with the addition of orange-peel and cardamom seeds; and those who consider such tinctures as of any avail, will find these very agreeable bitters. The most useful purpose, however, to which the tincture can be applied, is that of being added to the decoction or infusion, with the view of rendering them more grateful to the stomach.

Hyperanthera moringo, root—similar to horse-radish. The legumes, blossoms, and leaves, are all esculent. The seeds are the ben nuts of old pharmaceutical writers.

Their expressed oil " is used externally, for relieving the pain of the joints, in gout and acute rheumatism. This oil is remarkable for resisting rancidity; and, on that account, has been selected by the perfumers, as the fittest for being impregnated with the odour of jessamines, violets, tuberoses, and other flowers, which yield little or no essential oil, but impart their fragrance to expressed oils."

Jatropha curcas—Seeds analogous to those of the *Croton tiglium*, but milder, two or three being taken for a dose.

Justicia paniculata—Intensely bitter. Basis of the *drogue amere* of the Malabar coast.

Ligusticum ajawain. (Roxb.)—Ajava seed of Dr Perceval; aromatic.

Melia azedarachta et sempervirens—Leaves a nauseous bitter, without astringency.

Menispermum cordifolium—Decoction of the leaves febrifuge and tonic in gout; young leaves emollient.

Menispermum verrucosum. (Roxb.)—Intense bitter, used in the Malay islands for the cure of intermittents.

Mirabilis jalapa—root weakly purgative, and uncertain.

Nigella Indica—Seeds a principal condiment in curries, on account of their agreeable flavour and taste.

Ocimum pilosum (Roxb.)

" I have given the rihan a place in the catalogue, on account of the peculiar quality of its seed, which, when infused in cold water, forms a mucilage much used by the natives as a demulcent in catarrhs. From the slight aroma which it possesses, it lies easier on the stomach than most other vegetable mucilages. It is a favourite medicine with the native women, who take it after parturition, and suppose that it relieves the after-pains."

Phyllanthus emblica, fruit—a species of *myrobalans.*

Plantago Ispaghul (Roxb.)—Seeds mucilaginous.

Plumbago zeylanica et rosea—roots extremely acrid, used as vesicatories.

Punica granatum—Our readers will remember the account of the efficacy of pomegranate bark in tænia, published in the Ninth Number of this Journal by Dr Buchanan. Dr Fleming now informs us, that tænia is not a common disorder in Bengal; but that since Dr B.'s communication, several cases of it have occurred to Dr Hunter and Dr Shoolbred, in which the bark of the pomegranate root was used, and without having failed in a single instance.

Rubia manjith (Roxb.)—analogous to madder.

Sida cordifolia, rhombifolia, et rhomboidœa (Roxb.)—mucilaginous.

Strychnos nux vomica—nuts sometimes added by distillers to arrack, to make the spirit more intoxicating.

Strychnos potatorum.

"The seeds of the strychnos potatorum, though never used in medicine, are highly valuable, and serviceable, to both Europeans and natives, from the quality which they possess, of clearing muddy water, and rendering it potable; to which the trivial name of the tree, first given to it by Kœnig, alludes. One of the seeds is rubbed very hard, for a minute or two, round the inside of an earthen vessel, into which the water is poured and left to settle. In a short time, the impurities subside, and leave the water perfectly limpid and tasteless."

Swietenia febrifuga—Bark astringent and febrifuge.

Terminalia belerica (Roxb.), *et chebula*—furnish different kinds of myrobalans.

"Those chiefly used in medicine, are the har, and the zengi har. The har is the dried ripe fruit. It is the largest of the myrobalans, of an oblong ovate shape, marked with five furrows and five ridges alternately. It is sometimes used medicinally as a gentle purgative, but more frequently employed for domestic purposes, particularly by the dyers, who consume large quantities of it for preparing the cloth to receive the colours. See As. Res. IV. 41.

"The zengi har is the Indian, or black myrobalan of the pharmaceutical authors. It differs from the other kinds, in having scarcely the rudiments of a nut, being the fruit dried in a half ripe state. It is of an oblong, pointed shape, about the size of a pistachio nut, of a deep black colour, and a firm, compact substance. Its taste is bitterish, and strongly astringent. The zengi har is, as far as I can learn, more frequently used in medicine, by the Hindus, than any of the other myrobalans, being very generally employed by them as a purgative. It operates briskly, but without occasioning heat or irritation. Persons liable to redundancy of bile, habitual costiveness, or any other complaint which requires the frequent use of gentle laxatives, will find this one of the most convenient which they can use.

Terminalia citrina (Roxb.)—Its fruit is the *myrobalanus citrina* of the shops; it is chiefly used as a mordant in fixing the colours of the chintzes.

Valeriana Jatamansi—Indian nard; analogous to the officinal valerian.

Vitex trifolia.

"The leaves of the nisinda have a better claim to the title of discutient than any other vegetable remedy with which I am acquainted. Their efficacy in dispelling inflammatory swellings of the joints, from acute rheumatism, and of the testicles, from suppressed gonorrhœa, has often excited my surprize. The success with which the natives employ them in these complaints, has induced some European practitioners to adopt the practice, and I hope it will come into general use. The mode of employing the leaves is simple. A quantity of them, pulled fresh from the tree, is put into an earthen pot, and heat-

ed over the fire, to as great a degree as can be borne without pain. They are then applied to the part affected, in as large a quantity as can be conveniently kept on by a proper bandage, and the application is repeated three or four times a-day, until the tumor is diſpelled."

In the notes upon the imported drugs there is also some useful information. Dr Fleming praises the China root, from his own experience, (and it was formerly much used in the hospitals of Bengal), as at least equal to sarsaparilla, either as an auxiliary to mercury, or as improving the health after the use of that remedy.

Gamir—The extract of the leaves of the uncaria gambeer (Roxb.) or the fœculum deposited from a boiling infusion, which is by far the best. In appearance, and sensible qualities, it resembles the catechu, as also in its medicinal properties. Its taste is powerfully astringent, and at first bitter, but afterwards sweetish. Tried by the gelatine test, the gambir appears to contain more of the tannin principle than any other vegetable astringent; and, were it not for its high price, it would be a most valuable material for the preparation of leather.

Petroleum is very generally employed by the native practitioners, externally, as a stimulant in paralytic complaints, and in chronic rheumatism. In this last disease I can, from my own experience, recommend it as an efficacious remedy; having found much greater benefit from it than from the more costly cajeput oil, which I had previously used.

Copal seems to be the produce of the Vateria Indica.

Leeches are found in stagnant ponds and ditches in every part of India.

We shall conclude these copious extracts with the account of the meloe cichorei, an Indian substitute for cantharides.

"A very full and accurate deſcription of this ſpecies of meloe has been given in the 6th volume of the Aſiatic Reſearches, by Colonel Hardwicke, to whom we are indebted for this valuable acquiſition to our Materia Medica. The inſect abounds in every part of Bengal, Bahar, and Oude. In the rainy ſeaſon, during which it is in its moſt perfect ſtate, it is found feeding on the flowers of the various ſpecies of hibiſcus and sida, and is readily diſtinguiſhed by the three tranſverſe, undulated black bands on its yellow elytra, which conſtitute its ſpecific character.

"The meloe cichorei, when applied to the ſkin, produces effects preciſely ſimilar to thoſe cauſed by the Spaniſh bliſtering fly, for which this inſect will be found a perfectly adequate ſubſtitute, either as an external ſtimulant, a rubefacient, or for raiſing a complete bliſter, according to the mode in which it is applied.

"The flies ſhould be gathered in the morning or evening, and immediately killed, by expoſing them to the ſteam of boiling vinegar. They ſhould then be thoroughly dried by the heat of the ſun, and afterwards put into bottles, to preſerve them from humidity."

After the numerous extracts which we have given from this paper, our opinion of its merits will be readily perceived; but we cannot help noticing the peculiar propriety with which it comes from the head of the Medical Board of that immense colony, for whose use it is intended. It thus acquires a kind of official authority, while its intrinsic value affords the gratifying conviction, that the gentleman who is placed in that high and responsible situation is eminently qualified to fulfil its duties.

VI.

The Outlines of a New System of the Practice of Physic and Medical Surgery. By RICHARD REECE, M.D. Member of the Royal College of *Surgeons*. Large 8vo. pp. 310. Highley, London. 1810.

THE name of this *Doctor* is probably as familiar to most of our readers as that of Dr Brodum, Dr Senate, Dr Solomon, and other eminent professional characters, the ornaments of medical science, the great discoverers of all that is useful in the art, the true and disinterested benefactors of suffering and humanity. For who that has heard of the "Balm of Gilead," and the "Guide to Health," has not also heard of the "Medical Guide," and the "Dictionary of Domestic Medicine?" Who, that peruses the first and last pages of a London newspaper, (those repositories of so much modesty and truth), but finds his eye arrested by the name of Richard Reece, *M. D.*, with his "Guide" or his "Dictionary," blazoned amid the unassuming merits of Mr and Mrs Williams the unrivalled oculists, of Dr Cavallo's electric girdle, and of Dr Senate's new Novel? However, these ladies and gentlemen do not lie within the pale of our criticism; and so long as *Dr* Richard Reece confined himself to their society,—so long as he addressed himself to every man who would be his own doctor, and who would of course never consult us, either in respect to diseases or books, we deemed it inexpedient to take any notice of his publications. But now, when he presumes to instruct the profession; when he comes forward as the founder of a system, and sends forth his precursors, in the shape of newspaper-advertisements, announcing the commencement of "a new æra in medical science,"—the appearance of a new light, which

is to dissipate the mist of ignorance and hypothesis, and condemning all the accumulated knowledge of our forefathers, as a mass of crude "conjecture!"—It is time to warn our brethren against his pompous and impudent pretensions, and to advise them, in the language of the police-officers in a crowd, to "take care of their pockets." "Non omnes coqui sunt, qui magnos cultros gestant," is an adage of venerable antiquity; and it possesses an admirable fitness, mutatis mutandis, to the present swaggering race of *soi-disant* doctors. They are the only prominent characters in *the profession*. Their names are everywhere before the public; on posts and walls, in newspapers and magazines, in pamphlets and huge volumes; in short, they are everywhere, except in the rolls of colleges and universities! and, what is more astonishing, since colleges do not make them, they *make colleges:* for one of the tribe designates himself a member of the Royal College of Physicians at Aberdeen,—a learned corporation, which exists only in his title-pages and advertisements!

From what seat of science *Dr* Richard Reece dispenses the benefits of his new system, we might not, at this distance have discovered: but instinct is uncontroulable; and the ass will bray, though clothed in the skin of the lion. Dr Reece cannot write a preface, except in the shape of an *advertisement:* and accordingly, as drugs are now shamefully adulterated, he 'finds it necessary to request, that gentlemen, who may *think right* to give the methods of treatment proposed a trial, will procure the medicines at the CHEMICAL AND MEDICAL HALL, No. 20, Bedford Street, Covent-Garden." "Because," the *Doctor* adds, "No article, pharmaceutical or chemical, is sold there, which has not been previously examined by myself!" (Pref.) In a word, this "HALL" of the oracle, is, in our vernacular tongue, called a *chemist's shop;* and the *Doctor* is chief manipulator in the firm of Reece, Burgess, and Co. And moreover, although the first sentence of the preface informs us, that, in publishing this new system of physic, the author is "neither prompted by vanity, nor by motives of interest;" yet the foregoing invitation shows a very laudable attention to the advancement of the trade, and the benefit of his partners. But this preface likewise includes two other *advertisements.* First, it informs us, in a note, that the Doctor has another literary bantling under his protection, entitled the "Monthly Compendium of Medicine, Surgery," &c. through the medium of which he is ready to correspond with the public; "a work *at* which the price is so low (being only one shilling each number) as to be within the reach of every class of practitioners." And secondly, it announces that an *intended* "course of lectures *will be given* GRATUITOUSLY," (O! Quackery, how

multiform are thy shapes!) at his house in Bedford Street, Covent-Garden, to elucidate the present publication.

This long prefatory statement appeared to be necessary to the subseqent illustration of the work itself; upon which, however, it will not be requisite to dilate our criticism to any great length, in order to display all the original acumen which characterizes the new system. We are, indeed, far from insinuating that science is a thing of aristocratic birth; and that those only, who have earned their honours in the established institutions of learning, are capable of augmenting the stock of knowledge, or are worthy of being heard. But, while we admit that all pretensions must be estimated by their intrinsic value, we would intimate that great pretensions are scarcely ever the concomitants of real merit. Ecce signum, as Falstaff says.

Before our author enters upon the delineation of his "system," he informs us that a knowledge of ancient medicine is requisite to form a respectable medical character; and remarks, that, "when the title of *Doctor* is *assumed* merely as a claim to the fee, which is too often the case, it is, perhaps, of little consequence whether *the impostor can read.*" (p. 1.) And it appears to us, that the history of medicine, here given, might have been produced by one who possessed very little of that art: for it consists of scarcely more than an enumeration of *names*, which might have been taken from any chronological index to a medical history. In truth, putting the nature of the information out of the question, we never witnessed so shameful an imposition upon the pockets of readers, as this volume, and more especially this part of the volume, exhibits. It is printed upon the largest paper ever used, the page measuring about eleven inches by seven! ("I had my rule and compasses, my lord.") Yet the lines and half-lines are so thinly scattered over these almost blank sheets, that there are barely 110 complete lines in twenty-two pages, viz. from page three to twenty-four inclusive! We shall quote a few *pages!*—e. g. page 8th.—"He was born in the first year of the eightieth Olympiad (460 years before the nativity of Christ), and died at the age of ninety;" the rest of the page is blank. Hippocrates is here alluded to.

Page 19. "According to Celsus, medicine was divided into three branches, viz. dietetic, pharmaceutic, and surgery."

"Tres partes deducta—*more probably means the particular attention paid to each branch.*"

"Of the Pharmacopolæ and Herbalists."

Page 22. "Of Attalus Philometer, the last king of Pergamus."

"The Pergamini—rivals of the Egyptians in collecting books."

These luminous passages are placed at various distances from each other upon the almost blank leaves; whence it would appear that we, who purchase this costly book at a distance, have nothing to do but take a journey to London, and to fill up the blanks by manuscript notes, from the oral instruction of the *Doctor*, in his gratuitous lectures! Truly this is a "new system!" Among the various modes of causing a man to part with his money, without any equivalent, to which names have been given, and punishments awarded, this "new system" seems to have never been thought of, and therefore at present it must remain anonymous.

But with respect to the remaining part of the new system, which is erroneously said to relate to the "practice of physic," the reader will look in vain for any other novelty than a change of *terms*; such as might naturally occur to a druggist of uncommon genius, while superintending the processes of ignition, ebullition, distillation, effervescence, &c. in his laboratory; and observing the sparks and shocks of his electrical machine. Here, he might say to himself, we see a most happy illustration of the phenomena of life! "The LIVING HUMAN BODY may be considered an *animal elaboratory*, in which are constantly going on a variety of processes dependent on *chemical affinity*" (p. 52). Life itself is, indeed, a sort of inflammation or combustion; or, in other words, "The vitality of the body primarily depends on a species of *ignition*, which I shall term *animal ignition*." (p. 55). Oxygen, which supports my furnace-fire, is also of "use in keeping up animal life:" (54). "The lungs supply the body with oxygen, the quantity depending on the quantity of red particles of blood," which are equivalent to the red-hot coals in my fire; and "the oxygen (is) conveyed over the body by the arteries, *for keeping up its general ignition.*" *Ibid.* But how beautifully may the analogy between the animal and chemical laboratory be still farther elucidated! My electrical machine, at the upper end of the room, is, as it were, the sensorium or brain of the laboratory: and, in like manner, "the brain is, also, an electrical apparatus to the body, supplying it with a peculiar electric matter, conducted over the body by the nerves. By the union of this animal electric matter with the oxygen of the blood, in the course of the arteries and accompanying nerves, there is a constant disengagement of caloric." (55). Whence Shakespeare justly calls the living body, a "sensible, *warm* being," and contrasts it with the "*cold* and kneaded clod;" thus anticipating the discovery, that *ignition* is the essential characteristic of life!

But the analogy does not terminate here. The philosophizing druggist continues—All the phenomena of disease in the *animal laboratory* are obviously explicable, according to the variations of its peculiar electrical powers, and their peculiar combinations with the oxygen. All diseases consist in increased or diminished ignition, or in the increased or diminished electrical powers of the brain: just as all the disorders and accidents of my chemical elaboratory arise either from the explosion, excessive ebullition, or the contrary, in my retorts and alembics, when the ignition in the grates is too high or too low; or from the varying powers of my electrical machine! Thus, then, all the forms of febrile disease, or pyrexiæ, Class. I. (for in my "*new* system," I shall adopt the classification of Dr Cullen, p. 79.) are diseases from "*increased ignition.*" The term "intermittent" will of course be exploded, and the appellation of "*recurrent general increased ignition*" will be substituted (p. 81.); and so on, through the catalogue. "Inflammation" will be called "local increased ignition;" for although it appears probable, that even the ancients had some obscure notion of life being essentially a sort of combustion, by denoting *fever* and *inflammation*, which are only life in excess, by words derived from πυρ, *fire*, or from *ferveo*, and *flamma*; yet it is quite obvious, that their ideas on the subject were very superficial, and therefore that their language ought to be rejected. One proof, however, that I have not been anticipated in my new theory, is, that no one before myself has ever treated "Of the difference of the heat produced by the combination of electric matter and oxygen, as in synocha, and from accumulation of electric matter and deficiency of oxygen, as in typhus fever and from excessive hæmorrhage," p. 55. No one has heretofore shown, that "when the electrical power of the brain is increased, and the blood not well oxygenated, low fever is produced; and "when the blood is super-oxygenated, and the electrical powers of the brain increased, inflammatory fever is produced." p. 56. Nor has any theory hitherto enabled us to explain the "cases of *excessive general ignition* of the human body, published in the Transactions of the Royal Society of London, and in the Journal de Physique," in which persons were burnt to ashes by spontaneous combustion; whereas, I can explain the fact most rationally, upon the principle that life itself is ignition; for, it was obviously a mere augmentation of the ordinary vital process; or in other words, they *died from excess of life.* Indeed an approximation to this effect takes place in all cases of "increased ignition," as we learn from "the appearance of the feces;" which, in febrile diseases, like coals in the furnace, become *charred* or converted into charcoal; or to speak more properly, are "*carbonated* and surcharged with hydrogene

gas." (p. 56.) Diseases of "diminished ignition" will arise "from compression of nerves or arteries, or deficiency of red particles of blood" (*ibid.*), just as the fire goes out, when I close my grate, or the fuel is deficient.

Farther, the brain, as an electrical apparatus, bears an accurate analogy to my machine of glass and leather; it emits both the aura and gentle sparks, and violent shocks. Of the former we have an example in the *rigors* of fever; for "contagious matter, introduced into the system by the lungs, first increases the excitability of the brain; an excessive *discharge of electric matter* is produced through the nervous (what?), producing a *sensation of shivering*; succeeded by increased ignition." p. 59. But when the body is falling asleep, it sometimes forms an electric battery; for an "accumulation of electric matter in the body, the dry state of the skin not affording a conducting surface, often *suddenly discharge* from the brain on the approach of sleep, producing *an electric shock.*" p. 55. But the affinity between the animal and mechanical machines is still greater in respect to the influence of the weather upon them; for "the electrical power of the brain (is) affected by vicissitudes of the atmosphere: people whose cerebral system is too excitable can hence *prognosticate rain.*" p. 60. Rain is composed in the atmosphere, "the union of the hydrogene and oxygene, effected by electric fluid, thus affecting the *animal electrical machine.*" (*Ibid.*) Besides we know that "lightning sometimes, *by destroying the electrical powers* of the brain, produces instantaneous death; the body in such case exhibits no morbid appearance, except that the feces seem to be *charred*, and the brain is *sulphurous.* The feces in the lower intestines of a dark (carbonated) appearance. The brain emits a sulphurous odour." (58.)

But the builder of new systems does not stop here; he now discovers that THE EARTH itself is a great *living* laboratory! "Of its *vitality.* Its powers of *assimilation.* Of the chemical processes constantly going on in it. Of terrestrial animation or ignition. Of the difference between animal and terrestrial ignition. Of the difference between animal caloric and terrestrial caloric. Of animal electric matter and terrestrial electric matter. Of the electrical powers of the earth,—remarkable instances of *defunct* human bodies being *reanimated by it.* The cause of such deaths. Of the *Local diminished vitality* of the *Earth,*—the *cause* of *epidemic* fevers!" *&c.* This wonderful chemist will probably give some important information to his pupils; to the purchasers of his book he gives none (p. 61.), except that, in p. 100, "The probable cause of pestilential fevers" is said to be, "*the diseased state of the earth!*" on which the writer deigns to make this comment.

"Hence fevers, attributed to contagion, make an equally rapid progress, where guards have been placed, and high walls have been built, as in Russia, &c. to prevent communication; and some instances have happened of a great part of Europe, Asia, Africa, and America, suffering from similar fevers nearly at the same time. The partial appearances of pestilential fevers, and the frequent occurrence at the same place, are *proofs of some local diseased state of the earth*," &c.

But our readers must be already disgusted with such a detail of absurdity, as never issued from the brain of one still retaining the direction of his own affairs. It would, therefore, be altogether superfluous to attempt a farther development of this "*New System*," if we could accomplish it from the loose hints scattered over the large pages, of which this book consists. This, indeed, is the less necessary, as the author, even in his preface, justly anticipitates its fate. "My medical opinions," he says, "are too far removed from *common* ideas, and *common* apprehensions, to be approved of by the multitude, or to confer any popularity on the author:" a sentence which, whatever the reader might conceive to the contrary, evinces that some degree of the faculty of perceiving truth still remains in the *Doctor's* "electrical apparatus." His perceptions of grammar and orthography, however, are not always quite so correct, especially in regard to the Latin; as when he says "*a* putrid *effluvia*,"—"the effluvia *enters*;" (p. 99.) "the stamina depends;" p. 66—when he tells us, that the urine is charged with phosphate of lime in cases of "*Molitas ossis*;" p. 53, and thus copies Dr Cullen's definition of exanthemata.—"Morbi *contagiosa simel* tantùm in decursu vitæ, &c.; *definitio* tempore apparent phlogosis," &c. p. 196.—Other similar blunders occur.

After having thus gone through the fundamental principles of the new system, this very original chemist, who has borrowed nothing from the doctrines of the French chemists, now in every student's mouth, proceeds to give new appellations to all the diseases in Dr Cullen's arrangement, (whose characters, however, he copies), and goes on in the old routine of remedies. But then his practice "is too far removed from common ideas" to be conducted upon the common motives. He will give misletoe to epileptic persons; but it is only upon the idea, that it "*may* communicate *something* to the system that *may* improve the *electrical powers* of the brain." (p. 73.) He will likewise prescribe the vegetable bitters; but not as vulgar tonics or corroborants;—they are intended to "*prevent decomposition*, by *increasing the cohesion* of the body;" and he will talk learnedly and chemically, at the same time, about "the diffusibility of *tannin*."

In a word, the annals of empiricism contain not such a paltry example of pompous imposition and splendid nonsense, from the days of John of Gaddesden downwards, as is exhibited in this wire-wove imperial octavo.

VII.

Cases of Organic Diseases of the Heart, with Dissections, and some remarks, intended to point out the distinctive symptoms of these diseases: Read before the Counsellors of the Massachussets Medical Society. By JOHN E. WARREN, M. D. Boston, 1809. 8vo. pp. 61, and 2 plates.

THESE cases, ten in number, are sufficiently interesting; most happily illustrate the general observations of Corvisart, with which Dr Warren appears to have been previously acquainted; and prove how constantly the principal organic lesions of the heart are connected with the external phenomena which the French physician has shown to be diagnostic of these changes.

Of these cases, seven were examples of solid enlargement, and active aneurism of the heart; there is one case only of simple dilatation or passive aneurism. These eight cases were connected also with ossification, or induration of the valves. In the seventh case, the aorta and its valves were thickened, and the heart unaffected. In the eighth, along with rigidity of the tricuspid valves, and the pulmonary semilunars, the heart was found covered with fat, and enlarged, but whether solidly, or by simple dilatation, is not mentioned. To these cases is subjoined the following table.

Enumeration of the principal morbid changes observed in the organization of the heart, in the preceding cases.

Enlargement of the volume of the heart, or aneurism.

Increase of the capacity or aneurism of the right auricle } with thickened or thin parietes.
——— of the right ventricle }
——— of the left auricle }
——— of the left ventricle }
——— of the aorta, with thickening of its coats.

Fleshlike thickening of the mitral valves.
——— of the aortal valves.
——— of the aorta.

Cartilaginous thickening of the internal membrane of the heart, and generally of its valves.
Ossification of the parietes of the heart.
———— mitral valves.
———— aortal valves.
———— aorta.
———— coronary arteries.

Enumeration of the principal morbid appearances observed in these cases of disease of the heart, which may be considered secondary.

In the cavity of the cranium.

Inflammation of the meninges.
Water between the meninges.
Water in the ventricles.

In the pleura, and its cavity.

Inflammation and thickening of the pleura.
Collection of water in its cavity.
Lungs dark coloured.
—— generally very firm, and particularly in some parts.
—— loaded with black blood.
—— crowded into a narrow space.

In the pericardium and its cavity.

Inflammation and thickening of its substance.
Adhesion to the heart and lungs.
Collection of water in its cavity.

In the cavity of the abdomen.

Collection of water.
Liver very full of fluid blood
—— having its tunic flaccid and inflamed.
Mesenteric veins full of blood.

Cellular membrane full of water.
The *blood* everywhere fluid, except in the cavities of the heart.

In those cases which came under our author's notice, the symptoms most observable are the following—

"The first notice of disorder is commonly from an irregular and tumultuous movement of the heart, which occurs before any perceptible derangement of the other functions. This irregularity slowly increases, and arrives at its height before the strength of the patient is much impaired, at least in the cases which I have noticed; and as the vigour of the patient lessens, the force of the palpitations diminishes. These palpitations are often so strong as to be perceptible to the eye at a considerable distance. They are seldom most distinct in the place where the pulsation of the heart is usually felt. Sometimes they are perceived a little below; often in the epigastric region; and not unfrequently beneath, and on the right side of the sternum.

"After the palpitations have lasted some time, a little difficulty of

breathing, accompanied with sighing, is perceived, especially on any great exertion, ascending an eminence, or taking cold, of which there is an uncommon susceptibility. This dyspnœa becomes, as it increases, a most distressing symptom. It is induced by the slightest cause; as by an irregularity in diet, emotions of the mind, and especially movement of the body: so that, on ascending stairs quickly, the patient is threatened with immediate suffocation. It occurs at no stated periods, but is never long absent, nor abates much in violence during the course of the disease It is attended with a sensation of universal distress, which perhaps may arise from the circulation of unoxygenated blood, or accumulation of carbon in the system; for the countenance becomes livid, and the skin, especially that of the extremities, receives a permanent dark colour. This dyspnœa soon causes distress in lying in an horizontal posture. The patient raises his head in bed gradually, adding one pillow after another, till he can rarely, in some cases never, lie down without danger of suffocation; he inclines his head and breast forward, and supports himself upon an attendant, or a bench placed before him. A few hours before death, the muscular power is no longer capable of maintaining him in that posture, and he sinks backward. The dyspnœa is attended with cough, sometimes through the whole of the disease, sometimes only at intervals. The cough varies in frequency. It is always attended with copious expectoration of thick mucus, which, as the disease advances, becomes brown-coloured, and often tinged with blood. A short time before death, it frequently consists entirely of black blood.

"The changes in the phenomena of the circulation are very remarkable. The sanguiferous system is increased in capacity; the veins, especially, are swelled with blood; the countenance is high-coloured, except in fits of dyspnœa, when it becomes livid; and it is very frequently puffed or turgid. The brightness of the eyes, dizziness, which is a common, and headach, which is a frequent symptom, and in some cases very distressing, are probably connected with these changes. The motions of the heart, as has already been stated, are inordinate, irregular, and tumultuous. The pulse presents many peculiarities; in some cases, probably, where there is no obstruction in the orifices of the heart, it remains tolerably regular, and is either hard, full, quick, vibrating, and variable, or soft, slow, compressible, and variable; most commonly, perhaps always, when the orifices of the heart are obstructed, it is vibrating, very regular, very intermittent, sometimes contracted, and almost imperceptible, very variable, often disagreeing with the pulsations of the heart, and sometimes differing in one of the wrists from the other.

"The functions of the brain suffer much disturbance. Melancholy, and a disposition for reverie attend the early stages of the complaint; and there is sometimes an uncommon irritability of mind. The dreams become frightful, and are interrupted by sudden starting up in terror. Strange illusions present themselves. The mental faculties are impaired. The termination of the disease is attended with slight delirium, sometimes with frenzy, and with hemiplegia.

"The abdominal viſcera are locally, as well as generally affected. Although the digeſtive functions are occaſionally deranged, the appetite is at ſome periods remarkably keen. The action of the inteſtines is ſometimes regular, but a ſtate of coſtiveneſs is common. The liver is often enlarged, probably from accumulation of blood. This diſtenſion is attended with pain; varies much; and, in all the caſes I have ſeen, has ſubſided before death, leaving the coats of the liver wrinkled, flaccid, and marked with appearances of inflammation, caused by the diſtenſion and preſſure againſt the ſurrounding parts. An effect of the accumulation of blood in the liver, and consequently in the meſenteric veins, is the frequent diſcharge of blood from the hæmorrhoidal veſſels. This occurs both in the early and late ſtages of the diſeaſe, and may become a formidable ſymptom. Evacuations of blood from the noſe are not uncommon.

"Dropſical ſwellings in various parts of the body ſucceed the ſymptoms already enumerated. They commence in the cellular membrane of the feet, and gradually extend up the legs and thighs; thence to the abdominal cavity; to the thorax; ſometimes to the pericardium, to the face, and ſuperior extremities; and, laſtly, to the ventricles and meninges of the brain. Theſe collections of water may be reabſorbed by the aid of medicine; but they always return, and attend, in ſome degree, the patient's death.

"There is no circumſtance more remarkable in the courſe of this complaint, than the alternations of eaſe and diſtreſs. At one time, the patient ſuffers the ſevereſt agonies; aſſumes the moſt ghaſtly appearance, and is apparently on the verge of death: in a day, or a week after, his pain leaves him; his happineſs and cheerfulneſs return; a degree of vigour is reſtored; and his friends forget that he has been ill. The paroxyſms occaſionally recur, and become more frequent, as the diſeaſe progreſſes. Afterwards, the intermiſſions are ſhorter; and a cloſe ſucceſſion of paroxyſms begins. If the progreſs of the complaint has been ſlow and regular, the patient ſinks into a ſtate of torpor, and dies without ſuffering great diſtreſs. If, on the contrary, its progreſs has been rapid, the dyſpnœa becomes exceſſive; the pain and ſtricture about the præcordia are inſupportable; a furious delirium ſometimes ſucceeds; and the patient expires in terrible agony.

VIII.

A Commentary on the Treatment of Ruptures, particularly in a State of Strangulation. By Edward Geoghegan, Member of the Royal College of Surgeons, &c. London, 1810. 8vo. pp. 95.

The object of this performance is to maintain, that the taxis, or attempt to reduce ſtrangulated hernia by manual force and dexterity, is useleſs, dangerous, and ſhould be abandoned.

The aperture through which the hernia has passed, he observes, is in its natural state, and cannot be altered or enlarged; it is not dilatable; and the hernia is strangulated or irreducible, only because it has become enlarged and inflamed. The aperture is not dilatable, and the dimensions of the hernia exceed it; and the conclusion is, "that the latter cannot be passed through the former by any exertion of force, or by any manœuvre; unless that an alteration is effected in either, it is physically impossible." Next he argues, that the taxis can neither enlarge the one, nor lessen the bulk of the other; that it can effect no alteration in either, and must, therefore, be useless and unavailing. It is also dangerous, as it must excite and increase inflammation, and consequently the bulk of the protruded intestine. It appears, therefore, to Mr Geohegan, that the indication of cure laid down, generally, is not warranted by the nature of the disease, nor by the treatment; namely, to return the hernia through the apertures by pressure with the hands, because it is not the situation of the intestine, it is the enlargement of it which occasions the symptoms; and that state should, in the first instance, forbid the attempt, on account of its obvious impracticability. The only indication of cure which it admits, is, to reduce the hernia to the size of which it had been previously to its having been strangulated. In furtherance of this intention, all our efforts should be directed to the removal of the air and of the inflammation; and the surgeon should discharge out of his mind every idea of pushing back the hernia. Agreeably to this view, the means recommended, are repose and relaxed posture, the antiphlogistic regimen; the application of cold wet cloths to the tumor, blood-letting, and the tobacco glyster. But Mr Geohegan has also his taxis! He does not, indeed, expect, by it, to push the protruded gut through the ring, but merely to diminish its bulk, by forcing out the air by which it is distended.

"I surround the hernia with my hand or hands, at about its middle, in the way that I would grasp a gum elastic bottle, to press out its air, or other contents, by gently approximating its sides; always holding in view, that the tumor is to be emptied, and *not pushed up*, and that a little assistance to the compressing force which the coats of the intestines are exerting, by lessening its area, even in a small degree, the air will be strongly impelled against the part of the tube which is closed, and through which it is only necessary that it should obtain exit, to effect our purpose."

PART III.

MEDICAL INTELLIGENCE.

Report of Diseases treated at the PUBLIC DISPENSARY, *(near Carey-Street), London, from the 31st August to Nov. 30th* 1810.

Acute Diseases.

	No. of Cases.		No. of Cases.
Quotidiana	1	Herpes zoster	2
Synochus	15	Erysipelas	4
Cynanche tonsillaris	12	Hepatitis	3
——— parotidæa	1	Febris infantum	13
Odontalgia	1	Hydrocephalus	1
Catarrhus	70	Apoplexia	2
Pleuritis	3	Dysenteria	20
Peripneumonia	12	Peritonitis	1
Pertussis	2	Cholera	14
Scarlatina	12	Rheumatismus acutus	12
Rubeola	9	Arthritis rheumatica	4
Variola	3	Abortus	3

Chronic Diseases.

	No. of Cases.		No. of Cases.
Cephalæa	22	Tænia	2
Vertigo	2	Ascarides	3
Catarrhus chronicus	30	Hæmorrhois	1
Asthma et Dyspnœa	4	Hysteralgia	2
Palpitatio	2	Amenorrhœa	5
Hæmoptysis et Phthisis	14	Dysmenorrhœa	3
Dyspepsia	18	Menorrhagia	2
Gastrodynia	19	Leucorrhœa	8
Pyrosis	5	Prolapsus uteri	2
Vomitus	3	Nephralgia	5
Hæmatemesis	2	Ischuria	2
Scirrhus pylori	1	Dysuria	8
Icterus	5	Hæmaturia	1
Enterodynia	7	Diabetes	1
Peritonitis chronica	1	Rheumatismus chronicus	18
Diarrhœa	24	Lumbago et Sciatica	11
Colica Pictonum	1	Tremor paralyticus	2
Hæmorrhagia intestinalis	1	Epilepsia	4
Marasmus	11	Hysteria	6

Chronic Diseases continued.

	No. of Cases		No. of Cases.
Chorea	1	Impetigo	6
Asthenia	20	Pityriasis	1
Tympanites	2	Psoriasis	3
Obesitas	1	Scabies	7
Hydrops	5	Porrigo	2
Lepra	1	Aphthæ	2
Prurigo	4		

The weather, which had been dry and warm during the latter half of August, continued so, with little variation, until the middle of October: scarcely so much as a shower of rain having occurred during the whole of that period: Nevertheless, the temperature never reached any high pitch, but was uniformly moderate and grateful. The latter part of October was more variable; the temperature being often low, and several wet days occurred. The month of November has been remarkably wet; heavy and long continued showers falling almost daily, with some severe gales of wind from the south-west, and often with a gloomy and muggy atmosphere, or a moderate degree of fog. The last two days of the month have been frosty, with morning and evening fogs.

The exanthematous contagions have been epidemic to a considerable extent, especially the scarlet fever and measles; but they seem to be at present on the decline in our district. The cases under the head of rubeola were, with one exception, the sequelæ of the disease, consisting principally of a pulmonary affection, and in two or three instances of diarrhœa: The whole of them occurred in September and the first week in October; and no case of scarlatina has appeared at the Dispensary since the beginning of the present month. The last mentioned disease spread rapidly through the younger branches of the family, wherever introduced, and often affected the adults with sore-throat only, as is most usual.

The number of cases of asthenia is commonly considerable during the autumnal months. It consists of a general depression of the strength and spirits, with various sensations of lowness, sinking, and fluttering about the præcordia, sometimes with pains in the stomach or head, back and limbs, with loss of appetite, and indisposition to sound sleep. It is found chiefly in women of a middle age, and feeble habit; and, in the various cases that come before us, is traced to various debilitating causes, the operation of which seems to be aided by the influence of close and warm

weather, as we have before had occasion to remark. * In some it is attributed to the previous occurrence of other diseases, especially acute ones; in others it has followed child-birth, and more frequently abortion;—in others again it is connected with leucorrhœa, or, in older females, with the constitutional derangement accompanying the cessation of the menstrual discharge;—and in others, with derangement of the alimentary canal, of which costiveness is a general symptom. The predisposition to this asthenic state seems to be occasioned by the imperfect nutriment, the unwholesome habitations, the fatigue and anxiety, and the too long suckling of children, to which many of the poor females, who bring up families in the alleys of London, must necessarily submit. In general the use of vegetable bitters, combined with some diffusible stimulant, (such as the æthers and ammonia), affords a prompt relief to the spirits and morbid sensations of these patients, which would be more permanent, if rest and nutriment were combined with medicine.

Hæmatemesis, or vomiting of blood, is, like the disorder just mentioned, almost exclusively observed in women; we do not, indeed, recollect to have seen it in a male subject, independent of a violent local cause. The women themselves are usually disposed to attribute it to a suppression or irregularity of the catamenia †; but it occurs occasionally where that discharge is regular. If we consider the delicate texture of the stomach, the importance of its function, and its connexion with life, we cannot wonder that a hæmorrhage from the vessels of its internal surface should have excited considerable alarm. Hoffmann affirms, that "a vomiting of blood is of almost all hæmorrhages the most dangerous;" but he admits, at the same time, that, when it arises from plethora or suppressed evacuations, "we need not despair." ‡ Experience, however, teaches us that the ordinary form of hæmatemesis in females is generally a trivial disorder, and easily removed; especially since the use of refrigerants, astringents, and emmenagogues, has been superseded by the employment of laxatives, as suggested by Dr Hamilton. In truth, we have found the administration of laxatives more uniformly successful in the case of hæmatemesis, than in any other disease in which those medicines have been recommended by Dr Hamilton. It yields readily in general, to any laxative,—to the neutral salts, to calomel, or to rhubarb; and with the moderate operation of

* See the Report for the summer 1807, in Vol. III. page 504 of this Journal.

† Such an opinion, indeed, is as old as Hippocrates; who says; "Mulieri sanguinem evomenti, mensibus erumpentibus, solutio fit." Aphor. Sect. V. 32.

‡ See his Medicina Rationalis Systematica. Tom. II. Par. ii.

these medicines, the concomitant symptoms of indisposition, which accompany hæmatemesis, also readily disappear; namely, the languor and debility; the nausea and oppression of the stomach, and other dyspeptic symptoms; and the appearance of the complexion and countenance improves.

The single case of lepra, which has been so inveterate as to cover the patient from head to foot, is in a young woman, about 26 years of age, who had previously suffered two or three similar attacks of the disease, from which she recovered in a few months. She has been confined to bed for four or five weeks, in consequence of the inability to move, occasioned by the universal pain and stiffness of the skin, which is every day casting off and reproducing large thick scales, under which it is red, stiff, and shining. On the face, the scales are much smaller, and there are insterstices of sound skin, between the leprous patches; but even the edges of the eyelids are affected. Having taken the decoction of dulcamara for two or three weeks, with Plummer's pill, or the sulphur antimonii præcipitatum alone, the progress of the disease seems to be arrested, the scales are forming in smaller quantity, and the skin is becoming somewhat more supple. She had previously taken the arsenical solution without relief. In some places, especially about the joints, where the skin was chopped and a slight moisture issued, the application of the unguentum citrinum, considerably diluted, afforded relief.

The two cases of apoplexy terminated, as is usual, fatally. The head of one of the persons, a large plethoric man, addicted to drinking, was examined; and not only a great distension of the vessels of the brain, but a considerable extravasation of blood on the surface of one side, was found. The effects of a more gradual pressure on the brain were exemplified in a young woman, who had suffered an incessant headach, varying of course in degree, for a period of thirteen months. The pain affected principally the left side, from the ear to the side of the nose, but shooting frequently through the head. In the course of the year, she had suffered several fits, beginning with a faintness, which induced her to lie down, and going on to insensibility; sometimes accompanied with slight convulsive motions of the limbs, and a little frothing at the mouth; and leaving her somewhat uncollected in mind. Latterly the pain had affected her gums, and she had had two or three teeth drawn, without relief; the cheek became swelled, tender, and acutely painful, with tenderness of the scalp of that side of the head, as in the rheumatic hemicrania. I saw her within a month previous to her death, when neither evacuations by cupping and blistering, nor anodynes and diaphoretics, with a gentle action upon the bowels, afforded

any relief. Her person, however, continued rather en bon point, and was in this state when she died, suddenly, in one of the fits. An oblong, irregular cyst, containing a very thick, dark-green *pus*, intermixed with a little ragged lymph, was found adhering to the anterior part of the middle lobe of the cerebrum, extending obliquely forwards and downwards, and pressing upon the fifth pair of nerves, as it passes over the ridge of the sphenoid bone. The whole of the surface of the middle lobe adhered firmly to the dura mater; and that membrane, considerably thickened, was attached to the cranium. There were nearly two ounces of lymph in the ventricles, but the right hemisphere of the brain appeared perfectly sound. The situation of the abscess, in respect to the fifth pair of nerves, explained the affection of the cheek and gums, which led me to anticipate some affection of the antrum. T. B.

London, November 30, 1810.

VACCINATION.—Extract from a French Paper.—Office of Minister of the Interior. Central Committee of the Vaccine Institution, at Paris.

TEN years of labour and success, have at length decided the important question, as to the vaccine possessing the power of preserving all those, in whom it has regularly gone through its progress, from the small-pox. This has been carried to such a degree of certainty by the experiments of the Central Committee, and its numerous correspondents, as well Frenchmen as strangers, that there is not at present any fact in medicine better proved, or more certain, than that which establishes the truly *antivariolous* power of the Vaccine.

His Majesty the Emperor and King, to whom the different reports of the Central Committee have been presented, has been sensible of the advantages which would result from the general propagation of the new inoculation. His Majesty has seen the preservation and increase of the population of his vast empire, immediately connected with the adoption of this method. He has had an account rendered to him of the obstacles which, in some districts, might yet oppose its progress, and has found that these consisted principally in the great difficulty of procuring and preserving the vaccine fluid.

In consequence, his Majesty wishing to give to his people a signal mark of his paternal solicitude, has granted to his Excellency the Minister of the Interior, an annual and special credit, destined to provide for the expenses necessary for extending the practice. He has formed, in twenty-four of the principal cities of France, depots of the vaccine fluid, where every one who wishes to practise vaccination may be sure of always finding disposable matter. These are, Besançon, Bourdeaux, Brussels, Caen, Clement-Ferrand, Dijon, Florence, Lisle, Lyons, Marseilles, Mentz, Montpellier, Nancy, Nantes, Orleans, Parma, Rheims, Rennes, Rouen, Saintes, Strasbourg, Thoulouse, Tours, and Turin.

His Majesty has further created a Vaccine Committee at each of these depots, and has preserved to the Central Committee, established near his Excellency the Minister of the Interior, its original organization, in charging it with the central depot of Paris.

In conclusion, his Majesty has appointed, by his decree of the 6th Nov. last, annual rewards for those who shall have performed the greatest number of operations—collected the most important facts—overcome most obstacles—and arrested the course of variolous epidemics. These rewards have been so distributed that every effort has been noticed, and every labour proportionally recompensed.

They are thus determined:—1st, A prize of 8000 francs; 2d, two prizes of 2000 francs; 3d, Three prizes of 1000 francs; and 4th, a hundred silver medals bearing the head of the Emperor.

These powerful motives always to keep up and preserve the Vaccine fluid; this energetic incentive to an emulation which must direct all the efforts of the practitioners towards a rapid propagation of the Vaccine, leads to the hope that the public communication of his Majesty's benevolent intentions, will be sufficient to give a general impulse in favour of the new method, and banish in a few years, that scourge, the small-pox, from the French territory.

Already the returns of the mortality in the city of Paris, for the year 1809, exhibit only 213 deaths, by small-pox. This number, though yet too considerable, since the vaccine offered to these 213 victims a certain method of preservation, is yet extremely small in comparison of that of some years, when the epidemic small-pox has carried off, in the same city, more than 20,000 individuals. The Committee does not hesitate to attribute this diminution of mortality to the zeal with which the different Members, who compose it, have extended the practice in the large establishments to which they are attached, as physicians and surgeons; to the efforts of all the professional men, and of some ecclesiastics in the capital; and lastly to the conspicuous exertions of Messieurs the Counsellors of State, the Prefects of the Seine and of Police, the Mayors and their assistants, who have always seconded the Committee with the greatest zeal, and in many instances anticipated its intentions.

Every good man, and every friend to mankind, may hope then, that the new measures taken by his Majesty, will at length effect that which the labours of the Committee have long led them to expect. There is reason to believe, that they will so stimulate the emulation of all physicians and surgeons, that very shortly the small-pox, already unknown in many departments, where the zeal of the prefects has been such that there remain none to vaccinate but the infants born in every year, will entirely disappear from France, as the leprosy has done, of which no traces are found, except in the history of the worst governed ages of our Monarchy.

The Committee embraces this opportunity of reminding the public, that the Central Establishment of the Vaccine, founded the 7th Feb. 1801, and situated in No. 1. Rue de Battoir, St Andre-des-Arcs, is still carried on; that vaccination is practised gratuitously there every Tuesday and Saturday, at noon, that the children of the poor are admitted gratuitously during the course of the Vaccine; and that application for vaccine fluid should be addressed, under cover to his Excellency, to M. Husson, Physician of the Hotel Dieu, and of the Imperial Lyceum, Secretary to the Committee.

Given at the sitting of the 11th May 1810, the day of the 10th Anniversary of the foundation of the Committee.

Signed by all the Members.—Duchanoy, *President;* Corvisart, Delasteyrie, Dousin-Dubreuil, Guillotin, Hallé, Hazard, Jadelot, J. J. Leroux, Marin, Mongenot, Parfait, Pinel, Salmade, Thouret.—Husson, *Secretary.*

Fourth Annual Report of the Nottingham Vaccine Institution.

The preceding reports have not only traced the progress of the institution from the establishment in 1805, but have presented to the public authentic and incontrovertible

documents in support of vaccine inoculation; and the Directors, fully confirmed in the opinion of its efficacy, again, in this their fourth report, conscientiously recommend it as a safe and certain practice to eradicate that destructive pestilence the small-pox. Four children were, in the months of May, June, and July last, attacked with this highly infectious disease, in consequence only of their inhabiting houses in which the contagion had remained since the epidemic of last year: This most clearly shows the necessity not only of cleaning all the furniture, but of lime-washing the apartments of every house in which the small-pox has appeared, and more particularly when about to be occupied by a fresh tenant. The disease was, in another instance, introduced by a stranger from London; but in this, as well as in the former cases, it was prevented from spreading, by vaccinating all the individuals exposed to its baneful influence: Thus by the powerful and salutary agency of vaccine inoculation, the small-pox was confined to the subjects it first attacked.

The vaccinations up to the last report, in October 1809, were 3004; to these may now be added 307. This is apparently a small number; but when we reflect on the great prevalence of scarlet fever during the last six months, it will be obvious, that the practice must have been much restricted, as it is a principle of this Institution not to inoculate children either affected with or suffering from fever, except under very particular circumstances, which are always noted in the register.

The following then is the present state of the register.

2787 Satisfactory or perfect vaccinations,
332 Doubtful, or unsatisfactory vaccinations,
173 Blank, or those where the inoculation did not take effect,
19 Under progress of vaccination.

3311 Total of persons inoculated for cow-pox.

The division of cases into four heads has been too often explained to require any comment, further than our decided approval of the distinction which has been thus drawn from the first, and our conviction that it uot only facilitates, but gives precision to the practice.

This institution, founded and supported by benevolence, can only be efficient whilst it receives the protection of the public: It requires but little, but that little is necessary to its existence; yet the good effected by such small means is beyond calculation; and the benevolent, who have hitherto given this protecting shield to the poor, will, we are fully persuaded, still advance an arm for its support.

Statement of the Proportion of Deaths from Small-pox in London by a Physician in London.

THE following statement affords, at least, a very strong presumptive proof, if not a decisive one, that the new Vaccine Institution, for which the Government, through the representation of Mr Rose, has paid annually the sum of upwards of 3000*l.*, has not had the effect of promoting the practice of cowpock inoculation, and, of course, has not diminished the mortality by the natural small-pox.

It appears from the London bills of mortality for 1809, that out of the total number of deaths, viz. 16,680, there were 1163 by the small-pox, *i. e.* above one of fourteen deaths was by this disease. If the deaths under two years of age be excluded, viz.

4937, then the mortality by the small-pox, in the year 1809, amounts to one-tenth of the total number of deaths. Again, if the deaths by coughs and consumptions, be also excluded, viz. 5649, then the deaths by the small-pox will be found to be more than one-fifth of the whole mortality. *

The London bill of yearly deaths, as is well known, does not comprehend those of several large parishes, such as Pancras, Mary-le-bone, and the environs, which now make a considerable part of the metropolis, so that it is reasonable to reckon the deaths by the small-pox at one half more, viz. about 1700 in place of 1163. And if the mortality throughout the united kingdom were in the same ratio, and estimating the population of the metropolis at one million, and of the whole united kingdom at fifteen millions, the loss by the small-pox, in the year 1809, must have amounted to 25,500. The present year, 1810, will probably exhibit a still greater mortality by the small-pox, the weekly deaths being for some time past from thirty to forty.

At this time it is not intended to make any reflections upon the causes of the failure of success in the vaccine practice in general, or on the conduct of the National Institution in particular.

Account of the Society for the Relief of Widows and Orphans of Medical Men in London, and its Vicinity.

We have received the printed report of the Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity, a society, the principles of which it is impossible not to approve, and, as far as we can judge from the report, meeting with the encouragement it deserves. Instead of reprinting the list of office-bearers, though they evince the respectability of the Society, we have selected a few particulars as more worthy of being generally known. It was instituted in 1788. It consists at present of 282 members, and 102 have died since its institution. Its income last year was 963*l.*, and it distributed to the widows and orphans of medical men 310*l.* 10s. Before last year, the sum of its distributions were 2605*l.*, and it possesses

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* While we sincerely regret the peculiar circumstances which have prevented London from deriving the same advantages from vaccination with Edinburgh, and every other city in the empire, we do not admit the basis adopted by our valuable correspondent in his calculations. Upon the same principles, by excluding disease after disease, we might prove, that the total number of deaths, in the bills of mortality, was caused by small pox or by any other disease whatever.—*Editors.*

at present 17,600*l.*, 3 per cent. consols. The following regulations are worthy of notice.

No advertising proprietor of any empirical nostrum can be a member.

The widow of any member, having no child, and who has no estate, salary, pension, or provision whatever, of the yearly value altogether of forty pounds, is eligible to receive such assistance from the society annually, as the state of the fund will permit.

The widow of a member, left with a child, or children, entirely dependent on said widow for support, and who has no estate, salary, pension, or provision, of the yearly value altogether of twelve pounds for each child respectively, in addition to the forty pounds mentioned in the preceding law, is eligible to receive such additional assistance annually, as the state of the fund of the Society will permit.

Orphan, not having any certain provision to the amount of twenty pounds per annum, eligible to receive such assistance annually as the fund can afford; and moreover, additional assistance towards making up an apprentice fee.

No widow, or child of any member, can be eligible to receive relief from this institution, unless such member shall have been admitted twelve kalendar months previous to his death.

Members, under certain circumstances, rendered incapable of attending to business, may receive relief.

In cases of manifest and urgent distress, the Court of Directors are empowered to grant immediate relief, without waiting for the regular periods.

All sums of money granted to widows, &c. to be paid by the treasurer within twenty days after such sums have been voted by a Court of Directors.

To such as are inclined to become benefactors by will, the following form is recommended as proper:

"I give and bequeath to the President, Vice-Presidents, Treasurers, and Members of the Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity, in trust, the sum of
which I desire may be paid out of my personal estate, and applied to the purposes of the said Society."

N. B.—Devises of Land, or money charged on land, or to be laid out in land, are void, by the statute of Mortmain.

Inquiries by a Correspondent, concerning the Eau Medicinale and the Rhododendron Chrysanthum.

If it is not inconsistent with your plan to answer inquiries, you will oblige me by replying to the following in your next Number.

Has the Rhododendron Chrysanthum been lately used in Scotland? Has it obtained any reputation for the cure of gout or rheumatism? Is it cultivated in Britain? If not cultivated in this country, where or how is the genuine plant to be procured? Have the other species of rhododendron any medical powers?

The reasons for my wishing to obtain information on these points, are the following: A medicine has lately been imported from France under the title of Eau Medicinale d'Husson, and now much used for the relief of the paroxysms of gout, with great efficacy and perfect safety. The effects and operation of the

Eau Medicinale, and those said to arise from the use of rhododendron, are so strikingly similar, that I suspect the Eau Medicinale is prepared from the rhododendron. The Eau Medicinale is professed to be prepared from a vegetable substance, which vegetable is said to be discovered; and an imitation of the Eau Medicinale is made from it, and advertised for sale in London, but still as a secret.

Dr Home's experiments with rhododendron were unsuccessful in acute rheumatism, but it was found to be active and powerful; and as it has obtained a place in the Materia Medica of the Edinburgh Pharmacopœia, I am in hopes, that you, Gentlemen, or some of your readers, will be able, from later experience, to say whether it is possessed of the virtues attributed to it by Koelpen, and others upon the Continent.

In Dr Woodville's Medical Botany, there is a figure of the Rhododendron Chrysanthum. It is a native of Siberia, and he says is not yet introduced into Britain. I have not found it in the catalogues of our nurserymen, nor in our plantations and shrubberies; but my local and confined situation may be the means of my not knowing where it is to be procured.

Should my suspicions prove well-founded, and the rhododendron be possessed of similar powers to the Eau Medicinale, it will be an acceptable service to gouty sufferers, and also to the faculty, to rescue an useful medicine from the hands of Quackery.

Answer by the Editors.

The last Rhododendron Chrysanthum used in Scotland, was a parcel of the dried leaves sent from Russia by Dr Guthrie of St Petersburgh, to Dr Duncan senior. It was introduced into the Edinburgh Pharmacopœia, chiefly on account of the reputation it had procured in Russia as a cure for rheumatism; but the trials here did not correspond with its reputation, as we never saw any remarkable benefit from its use. In particular, it never produced a purgative effect, and is therefore probably not the basis of the *Eau Medicinale*, which is said to operate powerfully even in small doses. It has not yet been cultivated in Scotland, although the rhododendron Dauricum has been mistaken for it. It is however mentioned in Don's catalogue of the Cambridge Botanical Garden, as introduced there in 1801, and is, as might have been supposed, marked *hardy*. It is figured in the Botanical Magazine for March or April last. The Rhododendron Ferrugineum is supposed to possess similar virtues.

We have lately been informed, that the digitalis lutea is supposed to be the basis of the *Eau Medicinale.*

Extract of a Letter, from a Physician in London, concerning the Empirical Gout Medicine, called Eau Medicinale d'Husson.

A number of respectable testimonies, it must be granted, have appeared within the last six or eight months in favour of this nostrum. But a keen and experienced observer will not feel conviction, notwithstanding the tide of popular opinion: 1. Because he will recollect, that on former occasions the public admitted the testimonies of patients, and even of medical men, as quite satisfactory of the efficacy of various gout medicines, which, however, proved to enjoy but a temporary existence.

2. Because the influence of public opinion is at present such as to carry efficacy along with the exhibition of any medicine which is not positively hurtful, but especially if it be a medicine which is really beneficial on account of purgative and perhaps some sedative virtues.

3. The shocking ignorance of medical science displayed in the printed directions by the author of the Eau Medicinale d'Husson, at least proves that the public is not indebted, to any person capable of adequate observation, for this medicine.

4. The known discredit, and even prohibition of this nostrum in Paris, serve to show, that in all probability it has, on trial, been proved not to answer the expectations of the Parisians.

With respect to the composition of the present favourite gout medicine, conjectures only are offered. It seems to contain, in a vinous solution, a purgative ingredient in a very small quantity of matter; a slightly bitter ingredient; and perhaps a narcotic or sedative one. The foxglove was early suspected as one of the articles, and although many trials seem to have disproved its existence in this preparation, some persons still are of opinion that it is one of the ingredients. Tobacco has been proposed, but on no just ground whatever. Toadstool has been named, on account of some similarity of colour and smell, and exhilarating effects. The purgative ingredient has been suspected by some to be scammony, by others to be elaterium.

I have just had a bottle of the Eau Medicinale shown to me, which has been twenty-five years in London; it was administered at that time, but gained no credit.

It is not intended by these observations to discourage prudent trials of the medicine in question; for certainly the evidence in its favour is quite enough to justify them: But as it is of importance that the truth be determined as soon as possible, medical practitioners may probably be assisted by the above observations.

On the treatment of Pulmonary Inflammation in Horses; on Inoculating Glanders and Farcy.

We are informed, on good authority, that Mr Colman of the Veterinary College, has adopted a plan, successfully, of treating horses labouring under inflammatory affections of the lungs, and coughs, viz. that of exposing them to the open, fresh, and cold air, in place of keeping them in warm stables.

Also the experiments of transferring the blood of glandered horses into the ass have been repeated, by which the glanders was produced; and again, of inoculating the horse with the matter of the nose of the glandered ass, and with the matter of farcy, by which the glanders was excited. Likewise the glandered horse became affected with the farcy.

On the Cause of the Red Colour of the Blood.

No fact seems to be more positively ascertained, by many respectable physiologists, than that the red colour of the blood is owing to red oxide of iron: there are, however, many others of equal authority, who do not allow that the asserted fact is proved. I shall be glad if the evidence on this point be further examined, and in the mean time offer the following experiment and observation.

Experiment.—I collected a quantity of the red part of human blood, by repeated ablutions of the crassamentum, by which I separated, of course, the coagulated lymph or albumen, and obtained the part desired in the form of a deposit from the water. This deposit was evaporated to dryness. It weighed 110 grains. By burning in a platina crucible, it afforded a half-fused, brown, tasteless substance, in weight two grains and a half. It was boiled in muriatic acid, which dissolved part of it. On evaporating the solution duly, it was not found styptic to the taste; on the addition of tincture of gall-nut it became blackish; on the addition of prussiate of potash it afforded a deep blue coloured precipitate, which on calcination, however, did not yield above one half of a grain of reddish-brown powder. Now, by estimation, this half a grain of reddish-brown powder was obtained from 10,000, or twenty ounces of blood. Is it then probable that this quantity of blood should derive its colour from half a grain of iron?

Observation.—On exposing the crassamentum of blood to heat

to separate the water from it, as soon as it grows hot, the colour changes from black, or red, to brown or grey. Is it probable that this change from *red*, or black, to *brown*, would occur, if iron oxide was the colouring matter of blood?

General Orders in regard to the Clothing of the Army, as affecting the health of the Soldiers.

Horse Guards, April 28, 1810.

Sir—The Commander in Chief has, with much concern, observed in various instances, in the clothing and equipment both of the cavalry and the infantry, such deviations from his Majesty's Regulations on these heads, as require his immediate interference; and he has commanded me to address myself to you on the subject at this particular season, when the patterns of clothing for the ensuing year are about to be sealed, not doubting that he shall receive from you the most ready and effectual assistance, to check in the regiment under your command an evil productive of the most serious bad consequences to the soldiers and to the service.

The first point to which it is the Commander in Chief's wish to call your attention is the make of the coat, which is in some regiments so cut away as literally to afford no covering or protection to those parts of the body where warmth is most essential, viz. the lower parts of the belly and the hip-joints; they are, moreover, made so tight, that they are with difficulty buttoned over the waistcoats; and they diminish the power of action in a mode highly prejudicial to the health and vigour of the soldier, drawing the body together, and checking that freedom and alacrity of motion in the body and arms, that are so conducive to the growth and expansion of the young, and to the comfort and health of all.

The shortness of the coat necessarily occasions a corresponding diminution in the length of the waistcoat, which, by that means, is reduced so much in its dimensions as to afford little warmth in winter, and to be totally useless for one essential purpose for which it was intended, viz. as a fatigue dress in barracks during the summer: To remedy these evils, the breeches are made of a preposterous length, and the waistband is brought so high upon the body as to be extremely inconvenient, and detracting from the military appearance of the men.

The caps of the infantry are not to be worn on one side, as is the practice in some regiments, but are to be placed even on the men's heads, and brought well down on the forehead; and the cap-makers are responsible that the caps are of a size which will admit of their being so worn.

There is another article of dress to which, though not furnished by the colonel, the Commander in Chief desires to call your attention, viz. the soldier's stock, which in some regiments is made of such a breadth as to be not only uncomfortable to the soldier, but injurious to his health, by pressing on the glands of the neck, and by that means exciting scrofulous swellings in constitutions where there is a tendency to that disorder. The stock, like every other part of the soldier's dress, should be adapted to the size and shape of the man.

The Commander in Chief requests you will make an immediate communication of the contents of this letter to the officer in the actual command of the —— regiment of ——, and direct that the letter may be entered in the orderly books of the regiment.

I have the honour to be, Sir, with much respect, your very obedient and humble servant,

(Signed)

Harry Calvert, Adjutant-General.

——, Colonel of the —— Regiment of ——.

Extract from the Star Newspaper, November 28th, concerning the Fever at Gibraltar and Cadiz.

We have often regretted that we preserved no documents concerning the fever which proved so fatal in Gibraltar in the year 1804. The newspaper accounts we neglected, because we relied with confidence upon receiving an accurate history of the origin and progress of the disease, from authority, or at least from some of the medical staff of that garrison. We then wrote for information to some of our professional friends there; but we were ultimately disappointed. For these reasons, we have availed ourselves, on the present occasion, of the activity of the Editor of the Star, who has obtained what appears to be authentic documents; and we shall be happy if the insertion of these should induce any of the medical gentlemen belonging to that garrison, to send us a more particular history of the epidemic.

"This morning we received Gibraltar newspapers and private letters to the 9th instant. It gives us great pleasure to state, that the fever which lately broke out in that garrison is nearly subdued. As every information respecting this malady is highly interesting, we have inserted various extracts from the Gibraltar Chronicle, as well as from our private letter.

"*Alicant, Oct. 24.*

"The sickness is growing worse and worse in Carthagena, where the number of deaths now amounts to between eighty and eighty-five a-day."

"*Gibraltar Bay, Oct. 30.*

"Sir—After carefully observing the symptoms and progress of the fever that lately raged here, and comparing it with the accounts of the malignant yellow-fever that prevails in the West Indies, I am clearly of opinion, that it is exactly the same disease. In its symptoms and character, it almost accurately corresponded with the description of that disease, given by Moseley on West India diseases. In the first or inflammatory stage, the most remarkable and frequent symptoms were, a very severe pain in the fore part of the head, sometimes shooting to the hind part; eyes red; face flushed and turgid; pulse frequent, full, and strong; skin very hot; these symptoms generally preceded by, and attended with costiveness.—I have not seen any pain or uneasiness of the stomach at this period. After two or three days, these symptoms are all much abated, and there is apparent relief; but it is soon followed by more distressing and unmanageable ones. There comes on a sense of uneasiness, and sometimes very smart pain at the pit of the stomach, soon attended with a vomiting, at first of the usual contents of the stomach, but afterwards of a dirty dark-brown, or black matter, sometimes almost like black muddy ditch-water. There were frequently, also, constant purging of the same kind of matter, but sometimes of different consistence, and not so watery as that thrown up. These alarming symptoms admitted of but little relief, and, when violent, sometimes carried off the unfortunate sufferer in twenty-four hours from their commencement; at other times less severe, and more lingering in their course: in a few cases the hiccough was very troublesome. One man, who, I understood, had been a long time ill, whose case I knew nothing of, as he was speechless when first I saw him, lay for better than two days in almost constant convulsions before he expired.

"A short time before death, the yellowness appears about the eyes, and spreads over the body; about the same time hæmorrhages have occurred.—I am, Sir, your obedient servant,

"W. Pym, Esq. &c. &c. John Arthur."

"*Camp, Nov.* 1.

"Sir—Having been above two years in the West Indies, as surgeon to the 61st regiment, during which time I had an opportunity of seeing much of the bulam or yellow-fever, so well described by Dr Chisholm, I am clearly of opinion, that the fever which has now made its appearance in the 7th Royal Veteran Battalion is the same disease; that it is highly contagious; and that the measures which have been adopted to prevent its spreading were absolutely necessary; a convincing proof of which is, that all the men who have died, came out of the same barrack-room.—I have the honour, &c. &c.

"W. Pym, Esq. &c. &c. J. KIDSTON,
Surgeon 7th R. V. Battalion."

"Mr Watters, Assistant-Surgeon, concurs in the same opinion."

"*Gibraltar, Nov.* 3.

"In addition to the cases of fever which were sent to the Lazaret on the evening of the 26th of last month, several soldiers, with the same disease, in the 7th Royal Veteran Battalion, were reported to Dr Pym on the 28th, two of whom died in the Regimental Hospital, which is situated within the sentinels forming a cordon around the infected district in the south, in consequence of which, the same precautions which had been taken before, were immediately had recourse to; and on the same evening, the whole of the Hospital establishment were encamped on the Lazaret ground. Several cases were also reported in the barracks of the same regiment; on which account it was thought necessary, with a view of putting a stop to the disease, to keep the whole regiment in quarantine. Preparations were immediately made; and the battalion, with all the women and children, marched from the barracks into camp, on the neutral ground, on the evening of the 29th. The greatest hopes are entertained of its having the desired effect. The regiment has only lost six men from this disease, and it is worthy of remark, that they were all taken ill in the same barrack-room.

"The Board of Health, which has been established in the garrison, last night made a report to his Excellency the Lieutenant-Governor, of which we subjoin a copy, together with several other reports or letters relative to the symptoms of the disease on board the transports, and in the Lazaret, and to the state of the public health in Cadiz and Carthagena.

"*Gibraltar, Nov.* 2.

"The Board of Health, established by his Excellency the Lieutenant-Governor, after receiving the reports of the medical gentlemen of this garrison, are happy in having it in their power to state, that the fever, which, according to the said reports, did exist, is diminished in its influence; and that, except in the Lazaretto, there are now no cases existing on shore; and that only three cases have occurred in the Bay since the last report.

(Signed) EDW. ARCHIBALD, V. Pres.
JAMES BELL, Sec."

"*Extract from Sir James Fellowes's Report upon the disease at Cadiz.*

"From all the information I have been able to obtain from the Spanish practitioners of eminence here, from the documents which have been presented to me from the Junta, and from my own personal observation in the public hospital of this city, I cannot doubt the existence of a disease of a dangerous nature in certain parts of this town.

"I have this night recommended to the Board, that as the danger to be apprehended from the disease spreading, arises from the number of persons collected together in close and ill-aired apartments, the utmost vigilance and authority must be used to separate the sick immediately, where it can be done, and to remove them to the public hospital.

"I have great satisfaction in mentioning, that, in my report to Lieutenant-General Graham, I have stated, that no case of the prevailing fever has appeared in the military hospitals, nor in any corps under his command.

"*Return laid before the Board of Health of Cadiz.*

Deaths in 1809.		Deaths in 1810.	
September -	174	September -	336
October - -	180	From 1st to 24th Oct.	593
	354		929

"So that, reckoning for the remaining days in October at the rate of only 25 per day, it makes 175, which added to 929 is 1104; making the deaths 750 more during the two months of this year than last year."

"*Copy of a Letter from Sir James Fellowes to James Duff, Esq. his Majesty's Consul-General at Cadiz, Nov.* 11, 1810.

"Sir—I have the honour to acquaint you, that the Reports which have been sent in to the Board of Health during the last week, have been of a very favourable nature, and confirm the opinion which is generally entertained here of the improving state of the public health.

"There have been but few fresh cases observed in the town, and the number of deaths are diminished.

"On the 8th inst. there were 19 burials, on the 9th 20, and yesterday 17.

"The British troops, both in Cadiz and at the Isla, enjoy good health.

(Signed) "JAMES FELLOWES."

"*Gibraltar, November* 8.

"The fever is now almost completely extirpated, there being no symptom of the disease in the garrison, and only three or four cases in the Lazaret established outside of the walls. The crews of the transports in the Bay also, which brought the disease from Carthagena originally, have mostly got rid of the disease."

ST GEORGE'S HOSPITAL, *and Great George Street, Hanover Square.*—In the first week of October will commence a course of Lectures on the Practice of Physic, Therapeutics, and Chemistry, in the Lecture Room, No. 9, Great George Street, Hanover Square, (removed from Leicester Square), at the usual morning hours, viz. the medical lectures at eight, and the chemical at a quarter after nine o'clock; by GEORGE PEARSON, M.D. F.R.S. Senior Physician of St George's Hospital, Fellow of the College of Physicians, &c. A register is kept of Dr Pearson's Cases in St George's Hospital, and an account is given of them every Saturday morning, at a Clinical Lecture, at 9 o'clock.

Communications have been received from Dr CLARKE, Dr KING, Dr WRIGHT, Mr BALFOUR and Mr MELLOR.

THE

EDINBURGH

MEDICAL AND SURGICAL JOURNAL.

1. APRIL 1811.

PART I.

ORIGINAL COMMUNICATIONS.

I.

Medical Report for Nottingham. By JAMES CLARKE, M. D. Physician to the General Hospital, and to the Vaccine Institution.

" Il suffit de tenir un compte exact, mois par mois, des maladies, d'examiner celles qui sont à peu près egalement frequentes dans tous les temps de l'année, de noter ensuite celles qui varient, soit pour le nombre, soit pour les caracteres ipecifiques, et de comparer seulement ces derniers avec l'etat de l'atmosphere. "

PINEL, Medecine Clinique, p. 371.

OUR attention, since the time of Hippocrates, has been repeatedly called to an examination of the great influence the seasons evidently have, directly or indirectly, in modifying, and even inducing disease; but although this agency has ever been admitted, the science of medicine has not received that assistance which might have been expected with the source of information so clearly exposed. The difficulty and trouble of keeping meteorogical registers on a plan sufficiently accurate and comprehensive to form a satisfactory history of the atmosphere, and the deficiency of attentive observation, highly necessary to the improvement of medicine, are the causes to which we must in a great measure attribute our present deficiency in the application of this essential auxiliary to medical science. In keeping a

register of the atmosphere, it is necessary to be well assured of the correctness of the barometer, thermometer, and other instruments employed for the purpose, carefully examining them from time to time, that we may not be deceived in our observations. Of the want of this attention the reporter has seen many instances. It must always tend to the elucidation of subjects of this nature, if a regular form be generally adopted; the comparison of two or more registers may then be made with greater ease, and the conclusion drawn with more satisfaction. The meteorological table inserted in these reports is thus formed. The highest and the lowest state of the thermometer is noted every twenty-four hours; the state of the barometer at two P. M.; the points of the wind during the day, and the nature of the weather, remarking any atmospheric phenomena. The greatest variation of the barometer and thermometer during the month, with the quantity of rain, completes the journal.

The object of this meteorological register, is not only to foretel the probable changes of weather, but also to enable the attentive practitioner to explain the cause of symptoms which may arise in the course of disease. To elucidate this observation, we may call to our minds what often occurs in typhus fever, when a frost suddenly sets in: The patient complains of pain in the sides or chest, increased on deep inspiration; the pulse is sharp, yet feeble, the debility and other previous symptoms of the fever remaining equally distressing. The medical practitioner is now called upon to afford the patient immediate relief; he knows well that the pain may be moderated, if not removed, by general bleeding; but he is also aware of the consequences likely to arise from the abstraction of blood in the advanced stage of this disease; he therefore more prudently reasons upon the cause of this sudden alteration in the state of his patient; and instead of treating this accession of symptoms as pure pneumonia, he pursues a practice to moderate their urgency, and still follows up the plan he had laid down for the treatment of the disease. This, it must be allowed, is but a slight illustration of the advantage to be derived from extending our researches to the alternations of the atmosphere, and thus enlisting into our service a branch of science which has been neglected, only because its application has not been understood.

The case of diabetes related in the Sixth Volume of this Journal, page 264, has excited the attention of the Reviewer in the Medical and Physical Journal, * who, after quoting the theory

* See Medical and Physical Journal, Vol. xxiv. p. 157.

which follows the case, makes the following objections to it. He says, "If the increased flow of urine in the first instance is merely a vicarious discharge, if nothing but the sweating fluid is sent to the kidneys to be thrown off by them, in combination with the urine, we see no possible source of mischief, nor can we allow that any unnatural irritation is thereby produced, the two fluids being so exactly similar, we may almost say identically the same." In answer to these objections, it may be stated, that the profuse sweating cannot be a natural, but must be a morbid discharge, diverted from the skin by sudden exposure to cold, by eating acid fruits, drinking cold liquids, &c. Gaubius says, "Great profusion of sweat, which neither a more intense exercitation of the body, or emotion of mind, nor external heat, or what things are ingested, or applied externally, create, acknowledges for its causes laxity of the cutaneous pores, an accelerated circulation of the blood, an increased impetus towards the surface, or redundance of aqueous matter in the humours, or its too easy separation from the crassamentum." *

This discharge, besides being morbidly profuse, is, like other secretions, susceptible of a change, and may become stimulating even to the skin itself, and consequently much more so to the kidney, where it *then* must certainly act as a foreign body, exciting that organ to extraordinary action. But even supposing it to arise from a profuse natural discharge (the sweat) diverted to the kidney, we know from the experiments of Rye, that the average quantity of insensible perspiration in a day, in the healthy state, is estimated at 56½ oz. and of urine at 39 oz. Although Fourcroy in his system considers the sweat as the product of the accumulation of the molecules of perspiration which the air cannot carry off; yet we think this opinion is not sufficient to explain this profuse discharge on the cuticular surface, which may be moderately calculated at three times the amount of the perspiration in a given time. It may also be conjectured, and with much probability, that the watery parts which are secreted in the kidney, are not absorbed, but pass forward into the bladder. "In the mean time, the patulent veins, extended into the cavity of the follicle, absorb the more aqueous parts from the thin mucus, so that it becomes thicker as it is retained longer; but if, by the force of some stimulus, it be directly discharged after it is secreted, it comes out thin and watery." † From such sources, the urinary organs must give out a considerable quantity of fluid; and if we still keep in mind that the body is in a state of

* Erskine's Translation, p. 312. † Haller, Translation, p. 102.

diseased activity, we shall find sufficient source for the quantity of urinous fluid discharged by a diabetic patient. If these two fluids, sweat and urine, be identical, which certainly remains to be proved, (for nothing but bare assertion is advanced by the Reviewer in support of that opinion); and although Fourcroy in his system treats copiously on this subject, yet he advances nothing which can be considered as proving their identity; it still remains to be considered, how far the kidney may be influenced by the unusual quantity of fluid thrown into its capsule: For in examining the bodies of persons dead of diabetes, the vessels of the kidneys have always been found morbidly enlarged, and the secretion appeared to have been conducted on a large scale. This ought to have reminded us of the absolute necessity of accommodating our physiological reasoning to diseased structure, and of the advantages to be derived from morbid anatomy, in explanation of deranged action.

The Reviewer continues, "If also we suppose urine to be secreted in greater quantity, we should not expect the constant irritation of the urinary passages, and phymosis, to be referable to this circumstance, since we should apprehend these symptoms would rather take place from a greater concentration of that fluid, than from its increased quantity, and greater dilution." That there is a constant irritation of the urinary passages, and phymosis, in this disease, is thus tacitly admitted; but the great difficulty is to explain the cause of this symptom. It is not difficult to conceive, that irritation must exist, or why the constant desire to evacuate the bladder, which cannot be occasioned by the irritation of distention? but as it must have a cause, we naturally conjecture that it arises from the stimulus of the morbid urine on the urethra. Phymosis is not admitted in the general definition of ischuria, in which disease, the urine obtains the greatest concentration; we may therefore conclude, that this symptom is not the consequence of irritation of the bladder,—but it enters into the definition of what is called the ischuria urethralis, which plainly indicates, that it arises from an irritation of the urethra alone, and not of the urinary organs generally; but as the urine cannot be concentrated in this disease, it is vain to argue upon it as a cause of this symptom. There is one symptom in diabetes which affords some explanation of this affection; it is the great irritability of the body, as well as of the mind, and the proneness to inflammation. This was marked in Omrad to a great degree, and is admitted, by Dr Watt and others, as a general symptom of the disease. The extreme sensibility of the urethra subjects it to the particular influence of this general irritation, and thus may render it

so sensible to the stimulus of the urinous fluid, as to produce phymosis.

"Admitting," the Reviewer says, "the increased action of the kidneys to take place, we do not see why a greater supply of blood will be required for the system, so that the stomach must be called into inordinate action, and the desire for food proportionably increased, without time being allowed for its complete formation into blood." It appears almost self-evident, that if a greater quantity of urine be secreted, a proportionable supply of blood must be sent to the kidney,—as from this source only can this fluid be separated; but in the enlarged and excited state of the vessels, time is not allowed for this secretion to be perfect, and chyle may pass off with the secreted urine, or it may be called the urine of digestion or of the chyle, which, in the healthy state, is passed two or three hours after a meal, and cannot be considered as perfect urine.* The same arguments cannot justly, however, be applied by the Reviewer "to hæmorrhage, or extensive local inflammations." In hæmorrhage, nature effects a relief, and often a cure, by inducing syncope. If the bleeding returns, the fainting follows, and the system thus obtains relief; but the effect of syncope is to allay all irritation, or rather to impede for a time the circulation of the blood, and to induce atony; in consequence, the digestion receives a long interruption. In extensive local inflammation, "the stomach nauseates food, and ill digests that which is taken." The reverse of this occurs in diabetes; bulimia is admitted a prominent symptom of the disease; digestion is particularly active; the body nevertheless emaciates; the quantity of feces is not increased; yet the extraordinary quantity of solid and fluid aliment must be passed off,—and what objection can there be to admit that it passes by the kidney? Dr Bostock says, "except the kidney, there is indeed no obvious exit by which the contents of the stomach can be evacuated; the perspiration is checked; the alvine discharge is, in general, not increased; and the weight of the body is daily diminishing." †

The Reviewer then proceeds to remark, that "the stomach being irritated by the gastric juice, which the constant sense of hunger calls into the stomach, is certainly a novel idea, but perhaps not a very just one. Wherein resides this sense of hunger? and how is it produced? The converse of this proposition may be true, and the constant sense of hunger be produced by the presence of the gastric juice, perhaps in a vitiated state, from some

* See Fourcroy's System.

† Memoirs of the Medical Society, London, Vol. VI. p. 256.

disease of the secreting organs." In reply to this commentary, it may be advanced, that the old doctrine of hunger being excited by the attrition of the coats of the stomach, has been some time exploded,—and in its place we have the two following modern theories. "Should it not rather be considered a nervous sensation existing in the stomach, that, producing sensations, by sympathy, in every other part, and inducing a strong excitement kept up in the organ where it is situated, causes the humours to flow towards it from every part?"—Richerand's Physiology. But Bell says, "Hunger does not appear to be occasioned by stimulus, but by a want of due excitement, by which the irritability of the coats, and the action of the vessels are, as it were, suffered to accumulate; and thus tension and irritation, and fulness of vessels, is relieved by the food, which excites the action, draws out the fluids, and gives activity to the system of vessels." * These two theories, so opposed to each other, show the great diversity of opinion which prevails upon this intricate subject, and the scope that yet remains for future speculations. If hunger be produced simply by the action of the gastric juice on the stomach, it should not be appeased until the stomach is supplied with food. But this is not the case: for after hunger has existed some time, the sensation altogether ceases,—although there is no reason to believe that the gastric secretion has undergone any alteration. Besides, the experiments of Spallanzani, Stevens, and others, do not prove that the food is digested by a fluid secreted in the stomach; but, reasoning from facts that daily present themselves, we must conclude, that this secretion is mixed with the secretion from the salival glands, forming the compound called gastric juice: the desire for particular food has the effect of exciting these glands, and very probably, also, of increasing the gastric secretion, which the sense of hunger may in the same manner call into the stomach. "Wherein resides the sense of hunger?" To give a rational answer to this question, we must again have recourse to analogy. The sense of thirst is said to exist in the nervous papillæ of the tongue; and why may not hunger arise from a similar sense in the nerves of the stomach, although it may not be admissible to call them the nervous papillæ? In treating of the nerves of the stomach, Haller says, (p. 310.) "from their very great number, the stomach is extremely sensible, especially about the entrance of the gullet; insomuch that acrimonies, which are not perceived by the tongue, turn the stomach; the intestines are also known, by certain morbid observations, to be much more indolent; even

* Anatomy, Vol. IV. p. 63.

the naked skin itself is less sensible than the stomach. By making a ligature upon the nerves of the eighth pair, the action of the stomach and the digestion of food are destroyed." This experiment shows the absolute necessity of the nervous power to the process of digestion,—destroying the theory which attributes it solely to the gastric juice. The same experiment supports the opinion of the nervous influence causing hunger; to which nervous power we must also attribute the uneasiness and pain this sensation produces. The organ thus stimulated, after a time falls into a state of atony; and upon this theory only, can we explain why the uneasiness and pain ceases, without the stomach receiving food. It is only rational to suppose, that the gastric secretion is prepared when required for the digestion of aliment. It would appear to be an useless waste of blood, if this secretion were always going on whether required or not, the greater quantity of which would pass away as superfluous. This is not observed in any other part of the animal economy; and why should we expect it in this organ, which has no receptacle to retain its secretion until a demand arise for it?

Darwin in his Zoonomia somewhat favours these opinions, where he says, Vol. ii. p. 260, 8vo edit. "It is probable, that the pleasureable sensation excited in the stomach by food, as well as its irritation, contributes to excite into action the gastric glands, and to produce a greater secretion of their fluids. The same probably occurs in the secretion of bile; that is, that the pleasurable sensation excited in the stomach affects this secretion by sensitive association, as well as by irritative association." In like manner, the pleasureable sensation in masticating food may induce the gastric secretion. We have no proof advanced, that in diabetes the gastric juice is in a vitiated state. The theory of Rollo, which attributed this disease to a deranged state of the powers of digestion, and the treatment which he founded upon this hypothesis, have been both laid aside, the one, as inadequate to explain the symptoms of the disease, and the other as ineffectual in producing a cure, or indeed an alteration of the symptoms. The field of observation is always open to every inquirer, and the suggestion of an individual may lead others to a more strict examination into the practical facts as they present themselves; and although it may be just, "that the most obvious and insurmountable objections to an hypothesis escape the notice of its framer," yet the objections that have been advanced, have not had sufficient influence in altering the opinion of the reporter respecting the origin and theory of diabetes.

The Reviewer concludes with the case of Rider, which he calls hemicrania. In the report given of that interesting case, it is said

to have been entered in the table under the head hemicrania; for, at the time the table was published, the disease had not terminated, and its character was not satisfactorily ascertained, although strongly suspected; but the following observation requires a little examination. "Dr Clarke speaks of the advantage of a clear diagnosis between tumor of the brain and hemicrania; we should rather say, in cases of hemicrania, it would be very desirable to ascertain if it depends upon organic disease of the brain: for, whether there is a tumor or not, the symptoms still constitute hemicrania, of which the causes may be various." The few cases that have fallen under the care of the Reporter, do not confirm the opinion of the Reviewer. The following definition given by Sauvages of hemicrania, "est morbus cujus præcipium symptoma dolor est in alterutro capitus latere, potissimum ad tempora, frontem, juxta oculos, isque vehemens, sæpe periodicus," * differs much from that of tumor of the brain, as described by Baillie, the symptoms of which are, "permanent uneasiness, or pain in the head; sometimes delirium, sometimes convulsions, and sometimes, it has been said, the common symptoms of apoplexy:" But this history was found too vague to be applied to the case of Rider; for it will be seen, on a reference to this case, that he was at times totally free from pain, or indeed uneasiness of the head; it was this great alleviation, without any known cause, that rendered the diagnosis difficult. But if the symptoms be the same, whether there be tumor or not, as the Reviewer asserts, a diagnosis, however desirable, is rendered impossible. Probably, the proper name for this disease is cephalalgia; but hemicrania is a term that is not usually applied to organic lesion of the brain. It is then a consideration of moment, to ascertain the diagnostic symptoms of those diseases which are the consequence of organic lesion of the brain, and not to conclude that the symptoms constituting hemicrania, may or may not arise from this cause.

The Reporter cannot close these observations without acknowledging the liberal manner in which his opinions have been reviewed.

The Epidemic Constitution, from April 1809 *to March* 1810.

April.—Snow fell in the night of the 4th, 5th, and on the 19th, to the depth of a foot in the forest.—Thunder and lightning on the 11th and 14th.—Rain in the night of the 13th, 14th, 15th, 16th, 25th, and 27th; the weather generally wet, and very stormy.

* Nosologia Methodica, Tom. ii. p. 55.

Catarrhus.—This disease, as may be supposed from the wet and stormy weather, was more frequently observed than in the last month. The pneumonic affections decreased.

Synochus, or common fever, was the prevailing disease of this month.

Variola was still very fatal, but less frequently observed. The practice of vaccination was attended with perfect success, and proved a most satisfactory security against the small-pox.

May.—Snow fell on the 2d. Thunder and lightning on the 14th, 15th, 16th, and 19th. Rain in the night of the 18th, 26th, 28th, 29th, 30th, and 31st. The wind westerly.

Synochus has become still more frequent than in the last month.

Pneumonia and *Catarrh* have been more prevalent.

Variola is declining very much.

June.—Rain in the night of the 3d, 5th, 8th, 10th, and 29th. The thermometer on the 1st and 2d, varied no less than 18°; on the 1st, at 2 P. M., it stood at 70°, and, at the same time on the 2d, at 52°.

The mild weather of this month has shown its effect upon the constitution. Pneumonic complaints are much less frequent, and very mild.—Not one instance of small-pox this month.

July.—Rain in the night of the 2d, 3d, and 5th. On the 29th, a storm of thunder, lightning, and heavy rain, came on about 5 P. M., and continued during the night. The weather this month showery—the wind northerly.

Rubeola prevailed in the lower part of the town; in one instance it proved fatal, previous to the appearance of the eruption—the disease, however, was in general mild.

August.—Rain in the night of the 2d, 5th, 6th, and 10th; on the 6th, loud peals of thunder at noon, followed by heavy rain; the storm increased about four P. M., when the lightning became extremely vivid, the thunder tremendous, and the rain descended in torrents. The storm continued nearly the whole night; the rain that fell from nine A. M. to five P. M., amounted to 1.72 inches. Thunder and lightning on the 10th and 18th. This month was very showery, the quantity of rain unusually large, to the amount of 4.50 inches. The wind generally in the south-west.

Phlogosis.—Swelling of the face, sometimes cynanche parotidæa and inflammation of the gums, followed by abscess, were the most prevalent affections.

September.—Heavy rain in the night of the 22d. The barometer this month averaged so unusually low (29.46), that it induced the reporter to refer to a meteorological journal kept in the neighbourhood. The barometrical observations were found

to agree, but those of the thermometer differed no less than eight degrees each observation; and on inquiry into the cause of this difference, it was found to arise from a defect in the instrument this person employed, and which had for some time escaped his detection.

Pneumonia was very frequent among children.

Pertussis.—A few cases of this disease appeared towards the close of this month.

Cholera.—Some very severe cases of this disease, with fever, followed by an obstinate diarrhœa, and much general debility.

Ophthalmia.—Many slight cases of this disease.

October.—Rain in the night of the 13th, 18th, 24th, and 25th. The weather this month cloudy and hazy.

Ophthalmia.—This disease became very general this month, and was considered contagious. It attacked the patient very suddenly, often in the middle of the night, with a violent pain in the orbit, and a sensation of sand in the eye. On rising in the morning when the attack has been severe, the eye discharged a purulent fluid, but this was only in the more acute cases; in the majority of instances, the disease was very slight, and was removed in two or three days by a simple collyrium and a saline cathartic.

Pneumonia.—Some few mild cases of this disease in the early part of this month.

Dysenteria was much more frequent than usual, not without suspicion that it arose from contagion, from the soldiers on furlough who had returned from foreign service. Debility of the whole alimentary canal was a complaint in those who had suffered from dysentery or cholera.

Catarrhus was prevalent, and the fever in almost every instance typhoid.

Pertussis and *Rubeola* were seen in a few sporadic cases.

Typhus was unusually frequent this month, and certainly proved very contagious; it generally passed through the family. The disease commenced with very strong rigor, often in the night, followed by heat of skin, great thirst, headach, lassitude, languor, pain in every part of the body, sometimes more violent in the chest and sides, and then attended with a cough, which induced many to have recourse to bleeding, of which they had soon cause to repent, for the patient seldom recovered a copious general bleeding; the pulse was extremely feeble, not always quick, the tongue much furred, oftentimes blackish at the root, and when put out tremulous; the bowels at the commencement costive, but as the disease advanced, without medical assistance, a diarrhœa generally followed. With some, the disease was accompanied with sore throat; the fever was not violent, seldom

attended with delirium, but lingering. Nearly one-half of the out-patients of the hospital, under the care of the reporter, who had been received for other diseases, had slight attacks of typhus. The only fatal case of those under the care of the Reporter, was attended with a vomiting of thick greenish and coffee-ground-coloured fluids. Medical assistance was not called to this patient until some hours after this fatal symptom had come on. The extremities had become cold; on the forehead a cold clammy sweat; and no means, that were resorted to, had the effect of restoring the natural heat of the body; the countenance was most ghastly; the true "facies hippocratica" was marked in each feature; an entire prostration of strength, the arms hanging down loosely by her side, the hair dishevelled, and a total insensibility to all surrounding objects. Opium, blisters, and every method that was tried proved of no relief; and in twenty-four hours from the first seizure, this fine young girl was an inanimate and unsightly corse. The previous indisposition had been so slight as not to interrupt her usual engagements, although the symptoms were certainly typhoid. But the following history shows the most general form of the disease.

Isabella Rider.—Has acute pain, shooting from the stomach, bowels, and sides, to the spine, but little pain in the head; eyes heavy, and painful; languor, lassitude, excessive thirst; pain in the stomach much increased after taking solids or fluids; urine in proper quantity, but very high-coloured; shiverings, followed by heat; pulse 96, small and feeble; restless in sleep; bowels regular. Was taken suddenly ill in the night, but knows no cause, and had not been knowingly exposed to the contagion. This patient was cured by the saline camphorated mixture, with the occasional use of a purgative. Under this simple treatment, without any variation, most of the cases were brought to a favourable termination: the purgatives never failed to remove the pain in the bowels, and give a stimulus to the whole system. Bark was repeatedly prescribed, but it always increased the fever, and even in the convalescent state was found injurious.

November.—Rain fell in the night of the 10th, 20th, 22d, and 25th; snow in the night of the 16th. The weather of this month moist and hazy.

Typhus still continued its ravages. It sometimes commenced with a painful swelling of the face, followed by complete ptyalism. In one instance, an effusion took place in the chest, attended with orthopnœa, and œdema of the legs; it terminated fatally.

Pertussis.—This disease was very mild.

Rubeola.—This disease was very severe; the fever ran very

high, attended with very great difficulty and anxiety in breathing, followed by severe and obstinate cough.

December.—Rain in the night of the 3d, 6th, 9th, 10th 11th, 14th, with lightning 16th, 17th, 18th, 21st, 25th 28th, 29th, and 30th. Snow in the night of the 24th. The barometer, at 11 P. M. of the 17th, 28.25 inches. Wind westerly.

Rubeola.—This disease was more prevalent than last month, attended with the same urgent fever.

Catarrhus, as usual in this season, was very frequent.

Typhus was very seldom observed this month.

January 1810.—Snow fell in the night of the 19th; the weather clear and frosty, but very cold; the thermometer averaged only 36°; the wind westerly.

Catarrhus and *Bronchitis asthenica* were the most frequent diseases of this month.

February.—Rain fell in the night of the 2d, 3d, and 26th. Snow in the night of the 24th, with a strong wind; on the 25th, hail storms, with boisterous winds during the day. The thermometer fell very suddenly sixteen degrees, and showed a cold of 14°. The wind westerly.

Synochus became more general this month.

Catarrhus still prevalent.

Scarlatina is observed in detached cases.

March.—Rain fell in the night of the 1st, 2d, 4th, 6th, 7th, 9th, 11th, 12th, 26th, 27th, and 30th. Snow in the night of the 15th and 24th.

Synochus and *Catarrhus* still continue the most prevalent diseases.

The Meteorological Table which follows, does not deviate from the plan pursued in the two last Annual Reports.

Meteorological Table for Nottingham, from April 1809 *to March* 1810.

1809.	Thermometer.				Barometer.				Weather.		Winds.				Pluviameter.
Months.	Maximum.	Minimum.	Medium.	Greatest var. in 24 hours.	Maximum.	Minimum.	Medium.	Greatest var. in 24 hours.	Fair.	Wet.	N. & N. E.	E. & S. E.	S. & S. W.	W. & N. W.	Rain in inches and decimals.
April,	56°	28°	42°	13	30.36	28.97	29.73	0.54	13	17	16	1	14	18	2.15
May,	77	38	57	9	30.26	29.23	29.84	0.45	24	7	10	15	19	15	1.80
June,	74	45	57	18	30.45	29.27	29.84	0.62	21	9	11	7	15	14	2.45
July,	78	46	59	10	30.12	29.39	29.88	0.24	17	14	9	4	10	18	1.44
Aug.	76	48	60	8	29.97	29.23	29.64	0.25	12	19	5	8	31	8	4.50
Sept.	72	34	50	12	29.87	29.05	29.46	0.63	25	5	2	5	11	17	3.13
Oct.	67	30	52	10	30.25	29.77	30.09	0.38	25	6	13	6	17	4	0.31
Nov.	54	26	42	11	30.41	29.03	29.86	0.77	18	12	12	2	6	22	1.18
Dec.	53	33	40	13	30.00	28.25	29.45	0.90	17	14	1	6	23	15	1.81
1810.															
Jan.	53	18	36	10	30.36	29.75	30.05	0.29	26	5	5	9	17	8	1.05
Feb.	54	14	37	16	30.34	28.73	29.75	0.68	19	9	7	4	21	7	1.03
March,	59	30	45	10	30.10	28.88	29.62	0.41	19	12	17	9	14	11	1.40

Annual Results.

Thermometer.		*Wind.*	*Barometer.*		*Wind.*
Highest observation,	78°	S. July 27.	Highest observation, June 25.	30.45	N. E.
Lowest observation,	14°	N.E. Feb. 20.	Lowest observation, Dec. 17.	28.25	W.
Greatest variation in 24 hours -	18°	June 1st & 2d.	Greatest variation in 24 hours, Dec. 18, 19.	0.90	
Annual mean -	48°		Annual mean, -	29.77	

Weather.	*Days.*	*Wind.*	*Times.*
Fair - -	236	N. & N. E.	121
Wet - -	129	E. & S. E. -	74
		S. & S. W.	198
	365	W. & N. W.	155
			548

Rain.	*Inches.*
Greatest quantity, in August, -	4.50
Smallest quantity, in October, -	.31
Total quantity for the year, -	22.25

Remarks.—The barometer is firmly fixed to a standard wall over the staircase, in an elevation of 130 feet; and the pluviameter is placed in a garden 140 feet from the level of the sea.

The following Table presents the number of baptisms and burials in the three parishes of Nottingham, for the last three years. There are several dissenting congregations, the children of which are not baptised by the church, and two burying-grounds besides those of the Established church; and as this table is formed from

the parish register, it consequently does not include the members of dissenting congregations, and is so far defective. But a true account of mortality in any large town cannot be procured, partly in consequence of the numbers who are buried in the neighbourhood, or carried to a distance by their relatives; yet as these causes do not influence one year more than another, the comparison may be as justly drawn as if it were a correct statement.

Baptisms and Burials in Nottingham for 1807, 1808, *and* 1809.

		St Mary's Parish.			St Nicholas.			St Peter's.			
		Males	Fems.	Total.	Males	Fems.	Total.	Males	Fems.	Total.	Gen. Total.
1807	Baptisms,	570	484	1054	67	42	109	24	39	63	1226
	Burials,	286	322	608	61	65	126	49	36	85	819
1808	Baptisms,	496	482	978	64	54	118	38	44	82	1178
	Burials,	239	244	483	53	37	90	28	36	64	637
1809	Baptisms,	501	464	965	47	53	100	44	33	77	1042
	Burials,	321	341	662	51	56	107	42	44	86	855

We next introduce the report of the patients admitted and discharged at the General Hospital, from March 25th 1809, to March 25th 1810.

	In.	*Out.*	*Total.*
Remaining on the books, March 25th 1809 -	45	322	367
Admitted since, of which 118 were accidents	269	1089	1358
Total	314	1411	1725
In-patients made out-patients - - -	92		92
Out-patients made in-patients - -		31	31
General Total	406	1442	1848
Cured - - - -	195	805	1000
Relieved - - - -	27	68	95
At their own request, and irregularity -	30	21	51
Non-attendance (most of whom were cured), -		158	158
Without relief - - - -	2		2
Dead - - - - -	11		11
Remain on the books, March 25th 1810 -	49	359	408
	314	1411	1725
In-patients made out-patients - -	92		92
Out patients made in-patients . -		31	31
	406	1442	1848

Diseases.	Ages,							
	5	10	15	20	25	30	35	
Asthenia	1	3	7	9	3	5	6	
Tympanites intestinalis								
Phlegmatia dolens					1			
Anasarca		1				1	1	
Hydrothorax						1	1	
Ascites				1	1			
Hydrocele							3	
Rachitis	4		2	1	1			
Scrofula	8	4	12	4		1	7	
Syphilis	2		1	6	13	10	9	
Icterus						2	1	
Gonorrhœa	1				5	2	4	
Dysuria			1	1	2	5		
Amenorrhœa			5	21	16	13	5	
Prurigo (universal itching)	1	1			2	1	2	
Lepra (Grecian leprosy)				1		1		
Psoriasis (dry tetter)	1		1			1	1	
Rubeola (measles)	10	2	1					
Scarlatina (scarlet fever)	6	6	4	4				
Erythema (red rush)	1	2						
Erysipelas (St Anthony's fire)					1	1	1	
Pemphigus (Vesicular fever)	2							
Pompholyx (water blebs)								
Impetigo (running tetter)	8		1					
Variola (small-pox)	27	9			1			
Scabies (itch)	5		8	2	2			
Porrigo (scald-head)	16	9	1	1			1	
Herpes (ring-worm)	1	2	2					
Varicella (chicken pox)	4							
Vaccinia (cow-pox)	245	9	1	4	1		1	
Aphthæ (thrush)	1							
Chyma (carbuncles)	1	1			1	2		
Caligo	2	2	1	1	1	3		
Amaurosis					1			
Calculus			1					
Strictura					1			
Hernia						1		
Bronchocele			2	3	1	1		
Tumour	2	3	2	2	2	1	1	
Scirrhus					1		2	
Cancer						1	1	
Hydrarthus		3			3			
Contusio	4	8	2	7	5	3	9	
Fractura	2	4	6	2	3	3	2	
Luxatio		2	1			2	1	
Vulnus	11	11	11	10	3	3	4	
Ileus	3	4	8	12	13	14	13	
Total	526	164	138	173	232	228	249	1

Diseases.	5	10	15	2	Total.
Intermittens			1		14
Synocha					5
Typhus	6	7	8		82
Synochus	25	16	14		157
——— infantum	29	17	4		50
Phlogosis	6	4	4		38
Ophthalmia	13	8	5		55
Cynanche tonsillaris		1			9
——— trachealis		1			2
——— parotidea					1
Pneumonia	9	6	1		41
Bronchitis asthenica			1		42
——— chronica					23
Catarrhus	35	8	6		106
Phthisis	2		3		117
Peritonitis					4
Hepatitis					6
Nephritis					5
Rheumatismus			1		20
Arthrodynia			1		59
Arthropuosis					3
Pleurodynia					8
Hepatalgia	1				21
Nephralgia					2
Hæmoptysis		1	1		23
Menorrhagia					25
Hæmorrhois					6
Dysenteria					8
Apoplexia					2
——— hydrocephalica	3	2			5
Paralysis	3		1		26
Dyspepsia					49
Gastrodynia					11
Hypochondriasis					14
Convulsio	3				3
Chorea		1			2
Epilepsia	1		1		7
Asthma			1		5
Pertussis	11	6			17
Colica					5
Cholera	4				19
Diarrhœa	6				10
Diabetes			1		2
Hysteria			1		43
Cephalalgia					20
Cephalæa					6
Hemicrania					2
Atrophia					12

There have been since the last year's report, nine amputations, and three cut for the stone. The average number has been 49 in-patients, and 326 out-patients.

There has been always an inaccuracy in the auditor's report of the Charity, which is partly rectified in the foregoing; for under the admissions, the out-patients made in-patients, and the in-patients made out-patients, were always introduced. Although a patient thus changes his designation, and is moved from one book into the other, yet he forms but one admission to the hospital, and can be considered only as one patient. The full force of this error will be seen on referring to the report in the third volume of this Journal, page 315, where no less a number than 3152 more are entered on the table than actually applied for relief. This mistatement is not peculiar to Nottingham; it is to be observed in the reports from other hospitals. The Norwich has carefully avoided this error; and very properly explains by a note the apparent difference between the admissions and discharges, which is even a more satisfactory method than the one adopted in this paper. The erroneous statement just pointed out, precludes the possibility of making any thing like a correct comparative estimate of the expenses of the Charity, or in fact any other calculation, for which it may be necessary to specify the actual number of individuals admitted on the books.

The table of diseases which closes this report, may be divided in three heads of practice.

	Patients.
The General Hospital received	1350
The Vaccine Institution -	261
The Reporter's private practice	772
Total	2383

II.

Cases of Apparent Paralysis of the Lower Extremities removed, by the Patient being attacked with Hepatitis and Gout. By Mr Mellor, Surgeon, Stafford.

May 23.—Mrs H——— aged 40, full habit of body, menses regular; has been unwell a month or five weeks; complaining of general debility; great weakness and numbness of the lower

extremities; has now much pain in the lower part of the back, sacrum, and pelvis. On examination of the spine, she complained of great tenderness of the sacrum and back; she cannot walk, or even stand, without being supported, nor can she turn herself in bed, or move the lower extremities. The bowels are very costive; the bladder appears to be paralytic, as she does not part with her urine oftener than once in 24 hours, and then in the quantity of two quarts; the skin is cool; tongue clean; pulse 80, and soft.

She was ordered to take six grains of calomel immediately, and a purging mixture every four hours afterwards, composed of sulphas magnes. infus. sennæ, and pulv. jalapii. This procured several large evacuations. She was then directed to take a mixture with gum guaiacum; also to rub the spine with lin. volat., to use the warm bath every day, and to apply a blister to the sacrum.

May 30*th.*—Complains of much pain in the epigastric and right hypochondriac regions; is completely jaundiced; has a short troublesome cough; the skin hot; tongue parched, and loaded with a yellow fur; great thirst; pulse 110, full and hard. An inflammation of a rose colour has attacked the outside of the right foot, which extends towards the toes, attended with swelling and great pain; the urine is in small quantity; makes it more frequent than she did, and it is very yellow; stools of a dirty white.

I bled her to the quantity of sixteen ounces; put her upon the antiphlogistic plan; gave her saline medicines with nitr. and vin. antim.; purged her smartly every day with calomel and infus. of senna, and pulv. jalap. The blood was highly inflamed; she was bled again on the 31st; also on the first of June, and on the fifth.

June 2*d.*—The gout has attacked the other foot.

June 4*th.*—The inflammation has attacked both hands, and even extends to the fingers; the feet are better; has more feeling in her legs, and can move them a little; in other respects much the same. Ordered to continue her present plan.

June 6*th.*—Feels much relieved by the last bleeding; the pain and inflammation of the feet gone; has more feeling in her legs, and can move them better.

June 8th.—Is in every respect better.

June 12*th*—Is in a convalescent state; the numbness of the lower extremities gone; and she is able to walk with a little assistance.

June 20*th.*—I saw her; found her well in every respect, and able to walk as well as usual; the bladder has recovered its tone,

and she has the inclination to part with her water three or four times within every twenty-four hours. The pain and tenderness of the spine, sacrum, and pelvis, and also the numbness of the limbs, are entirely removed.

If she had not been attacked with this violent inflammatory disease, would she have become paralytic?

Case of Hæmorrhœa Petechialis, successfully treated.

July 20th.—Ann Moore, 7 years of age, has been unwell near a fortnight; complaining of lassitude and great debility; has gradually lost her flesh; her appetite is good; tongue rather brown; great thirst; skin cool, pulse 90, but rather feeble; belly open. Five days ago, there appeared petechiæ upon the face, neck, arms, and every part of the body; the petechiæ were as thick in the skin as the eruption of the measles; she has bled for several nights frequently at the nose, and for an hour or two at a time; her shift is stained in spots all over with pale blood; there is also a spot on the inside of the knee, about the size of half a crown, as if it had been bruised, and of a yellowish colour.

Ordered to take a decoction of bark, with the muriated tincture of iron. To eat fresh animal food; ripe fruits; vegetables; to drink half a pint of port wine, diluted with an equal quantity of water, every twenty-four hours; and to sponge the body every four hours with cold vinegar and water.

August 1st.—Has bled a great deal from the nose; appetite good; sleeps well; petechiæ and hæmorrhage from the skin much the same. Ordered to continue her medicines.

August 5th.—Appears better; has had no return of the hæmorrhage from the nose; that from the skin less; tongue moister; thirst less; appetite good; petechiæ are beginning to change colour, from being livid to a yellowish appearance; says she is stronger, and is able to run about and play with her companions as usual. Medicines continued.

August 12th.—Petechiæ have almost disappeared; and she is in every respect perfectly well. The bark and tincture are recommended to be taken three times a-day for a fortnight longer.

Two Cases where Bleeding, so as to produce Syncope, cured the Disease immediately, without the aid of Medicine.

Miss Needam, aged 18, apparently of a full habit, pale complexion, but delicate constitution, short chest, has for the last two years been subject to violent attacks of spasmodic asthma, and an incessant, short, and irritable cough.

October 15th.—Was attacked after dancing with the cough, which is incessant, recurring every second of time, and which

appears to arise entirely from irritation; she has no pain or difficulty in breathing; pulse soft, but frequent; she has been coughing without intermission thirty-six hours; has taken opium, æther, camphor, assafœtida, and inhaled the steam of warm water, and also the vapour of æther, but without the slightest good effect. I bled her from a large orifice to the quantity of twelve ounces, until she fainted; she was very sick, and vomited a good deal. The cough immediately ceased, and did not return in the slightest degree again.

Mrs S——, aged 36, spare habit, had been subject to attacks of acute rheumatism; complains of violent and acute pains in her knees, ancles, elbows and wrists; is unable to walk without the support of two persons; skin cool; tongue rather white; pulse 80, but full, and rather hard; urine high-coloured; joints not swelled or inflamed.

I bled her from a large orifice, to the quantity of sixteen ounces; she fainted, and vomited, and was near an hour in recovering. I called upon her the next morning; found her busy in her domestic affairs; said she had had a very good night; was entirely free from pain, and could walk as well as usual; and has had no return of her disease.

III.

1. *Case in which the Larvæ of an Insect were voided in the Urine.*
2. *Cases of Poisoning by Foxglove and Corrosive Sublimate.*
3. *Remarks on Enlargement of the Heart.* In a Letter to Dr Duncan, jun. from William Henry, M. D. F. R. S. Physician to the Manchester Infirmary.

I had intended to send you an account of the first of the following cases, and had transcribed it from my notes for the purpose, before the number of your Journal fell into my hands, which contains Dr Bateman's valuable communication on a similar subject. As it does not appear, however, that any instance had occurred within the experience of that writer, in which larvæ were discharged from the urinary passages, I have not relinquished my intention of transmitting the case, along with some

others of a different kind, for insertion in the Edinburgh Medical Journal.

Case in which the Larvæ of an Insect were voided in the Urine.

July, 1809.—Mr F. aged about 62, of a robust make, and plethoric habit, has been occasionally subject to hæmorrhoidal affections for the last twenty-five years. About seven or eight years ago, he was induced one day, by the acuteness of the pain which he suffered, when at stool, to introduce his finger into the rectum, and succeeded in extracting a pin, of the swallowing of which he had no remembrance. During the last ten or twelve years, he has been in the habit of frequently voiding gravel; and, at an early part of that interval, discharged a small calculus, which, for several hours, impeded the flow of urine. The calls to make water are now very frequent and urgent; and, towards the close, he experiences severe smarting. He has complained, also, for the last five or six months, of a sense of weight, and of what he calls a *stabbing pain* about the neck of the bladder. This occasionally attacks him when perfectly still, and is invariably brought on by any sudden concussion of the body. Hence he has found difficulty even in walking; and riding on horseback has been long insupportably painful. The urine, at present, is loaded with a deposite, the colour of which varies, from its containing different proportions of uric acid, and the earthy phosphates, and from its being more or less tinged with blood, the quantity of which is sometimes sufficient to give the urine nearly the colour of port wine.

But the most remarkable circumstance in Mr F.'s case is, that, for five or six weeks past, there have been voided, along with his urine, the larvæ of an insect, pretty exactly resembling the common maggot. They are not only alive but vivacious; and besides those which are entire, the heads and bodies of several others may be observed, detached from each other. Of the entire insects, he has frequently discharged three or four at once; and they appear in the urine, when it is perfectly free from sand, and even when it is received into a glass vessel.

From Mr F.'s symptoms, it appeared to me not improbable, that a stone might be lodged in the bladder; and Mr Gibson, who was consulted, agreeing with me in this opinion, we were anxious to have determined the fact by sounding. To this scrutiny, however, the patient strongly objected; and we were, therefore, under the necessity of resting satisfied with the exhibition of palliative medicines, the chief of which were doses of uva ursi and opium, and pills with calcined carbonate of soda and soap. Under this course of medicines, and a proper plan of diet, he re-

covered much beyond our expectation; and has enjoyed greater freedom from pain, than had fallen to his lot for some years before. He still, however, (Jan. 1811) complains of some soreness, which he refers nearly to the orifice of the urethra; but he has not voided any of the insects, since the summer of 1809.

Some of the larvæ were put into the hands of a gentleman,* accurately acquainted with most of the branches of natural history; and by him I have been favoured with the following account, and the annexed sketch of them.

"The insect has evidently a hard crustaceous head, with strong maxillæ, like those of coleopterous larvæ. The body appears to have been soft and pulpy, and when magnified, has much the appearance of that of *curculio nucum*. A semi-transparent line is plainly visible, running from the head to the tail, which, in No. 3. is a little porrected, and darker coloured than the body. The body is covered with scattered short hairs or *setæ*. In No. 1. two short legs are visible upon the first annulus. The body consists of seven annuli, exclusive of the head. In No. 2. the head appears bruised, and rather mutilated, but is very perfect in the other specimens. Colour dirty yellowish; head bright chocolate.

"From the small size of this caterpillar, I cannot presume to say what it would have produced when arrived at its last stage, but have no doubts of its being a coleopterous insect, or beetle, of some genus, its appearance being similar to the larvæ of that class of insects, and indeed of no others. The position of No. 1. (which appears to be its natural one) corresponds precisely with that of the larvæ of *scarabæi;* whilst No. 2. and 3. have more the resemblance of *curculio*, particularly *C. nucum*, to which, when magnified, it bears a great resemblance."

In the plate, No. 1, 2, and 3. represent the insect of the natural size and magnified. No. 3. is the most perfect specimen. †

Effects of an excessive dose of Foxglove.

On the 17th of October, 1809, I was called to visit ALICE GRICE, aged about 60, as a home-patient of the Manchester Infirmary. She had laboured under ascites for some months, and though already an out-patient of the charity, under the care of one of my colleagues, had yielded, at the persuasion of a neighbour, to have recourse to a strong decoction of foxglove. It was prepared by boiling

* J. L. Philips, Esq. of Mayfield, near Manchester.

† Dr Monro, jun. authorizes the Editor to state, that he has met with a case precisely similar, and possesses specimens of the *larvæ* in his museum.

Fig. 1.

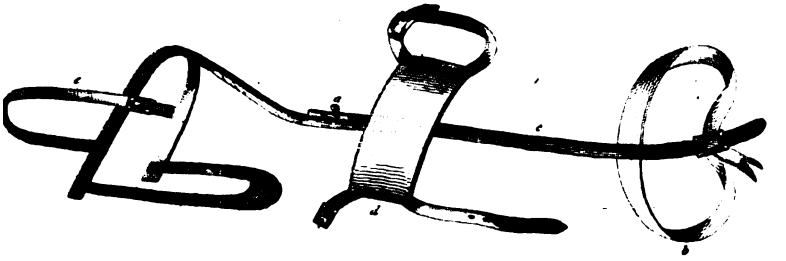
2

3

1

2

6



E. Mitchell sculp.

two handful of the leaves in a quart of water, during half an hour, and then pressing the mass, so as to expel the whole of the liquor. Of this, about seven o'clock on the morning of Sunday the 15th, she drank two tea cupsful, amounting, in the whole, as I afterwards ascertained, to not less than ten ounce measures. Before eight o'clock, she began to be sick, and discharged part of the contents of the stomach. Enough, however, was retained to excite violent retching and vomiting throughout the whole of that and the following day, during which, every thing that was taken was instantly rejected. In the intervals of sickness, she was excessively faint, and her skin was covered with a cold sweat. The tongue and lips swelled, and there was a constant flow of viscid saliva from the mouth. Very little urine was voided on Sunday; and, on the two following days, the action of the kidnies was entirely suspended. When I saw her on Tuesday, the sickness had somewhat abated, though it was still extremely distressing. The tongue was covered with a white fur; the ptyalism continued, though in a less degree; and the breath was fetid. The pulse was low, irregular (not exceeding forty), and after every third or fourth pulsation, an intermission occurred for some seconds. She complained, also, of general pains in the limbs, and of cramps in the legs.

Though the danger appeared to me to be greatly diminished, yet something was absolutely necessary to abate the harassing sickness. I directed, therefore, effervescing draughts, prepared with infusion of columbo and carbonate of ammonia, with the addition of ten drops of laudanum to each, to be taken every three hours. In the intervals, thirty drops of a mixture of æther and the compound spirit of ammonia, were given occasionally; and she was supplied freely with wine from the hospital. Under this treatment, the sickness and vomiting soon abated, and she gradually returned to her former state of imperfect health. The pulse, however, did not completely regain its regularity before the commencement of the following week.

It may be proper to state that the ptyalism, which occurred in this case, was entirely an effect of the digitalis; for no mercurial, as I afterwards learned from Dr Bardsley, had been given to the patient while under his care; and she assured me that she had not deviated from the directions of her physician, in any respect, except in taking the foxglove. I was induced to have recourse to opium as a remedy, by the indistinct recollection of its success in a similar case, described by Dr Beddoes, the details of which I have since found in the 5th volume of Dr Simmons's Medical Facts.

Case of Poisoning by Corrosive Sublimate.

The following case is chiefly interesting, from its bearing upon a point of some importance, which was discussed on a trial for murder at the Lancaster assizes in 1808. The defendant, on that occasion, appeared to owe his acquittal to the fact, that no poisonous substance could be detected after death, in the contents of the stomach or bowels, though the proper tests were applied, with great skill and judgment, by Dr Bostock. It was the declared opinion, however, of that physician at the time, and was afterwards proved by a course of experiments on animals,* that a poison may produce fatal effects, and yet be so completely evacuated by vomiting or purging, as to leave no trace, discoverable by chemical analysis, in the contents of the alimentary canal. Some time after this period, the following case occurred to my friend Dr Holme, who obligingly pointed it out to my notice.

Hannah Tomlinson, aged about 20, was induced, by a series of ill-treatment, and by the apprehension of pregnancy, to form the resolution of destroying herself. With this view, she poured about a quarter of a pint of hot water on an ounce of corrosive sublimate, and drank the whole of what the water could hold, both dissolved and in suspension. The act of swallowing was attended with a violent spasm of the glottis, and a small quantity of the liquid was rejected from the mouth. In less than half an hour, she became extremely sick, and discharged the contents of her stomach. The retching, however, continued, and she threw up a considerable quantity of blood. On the following day, the sickness had not abated, though the hæmorrhage had ceased. From this time to the period of her death, which, notwithstanding the most judicious treatment, happened on the sixth day, she continued to labour under sickness, anxiety, restlessness, quick pulse, and universal pains in the limbs. To these symptoms supervened, on the fourth day, great pain about the scrobiculus cordis, and tenderness on pressure; and a few hours before death, a complete paralysis of the upper and lower extremities took place.

Some of the fluid, which had been vomited about twelve hours after she had taken the sublimate, was carefully examined by Dr Roget (now physician in London) and myself. The tests applied were those which are described in my *Elements of Experimental Chemistry*, Vol. ii. page 393; but neither in this liquid, nor in that found in the stomach after death, were any traces of the poison discoverable.

* Edinburgh Medical and Surgical Journal, v. 14.

On the day after her decease, the body was opened by Dr Roget, in the absence of Dr Holme from town. The external appearance of the stomach and intestines were perfectly natural. About two ounces of a thick yellow ropy fluid were found in the stomach, which was but moderately distended with air. On its inner surface, numerous dark red spots, indicating inflammation of the villous coat, were observable. They extended the whole length of the smaller curvature, and occupied the greater part of the fundus, but did not appear in the lower portion of the large curvature. To me they seemed to resemble, very closely, a similar appearance, which I have three or four times observed in the stomachs of persons who have died of hydrophobia. No abrasion of the villous coat was perceptible. The inner coat of the duodenum, as far as the middle of its length, presented the same appearance of inflammation. The lower part of the œsophagus, for about three inches above the cardia, was slightly inflamed; but higher up, it was of a natural colour. The liver and spleen were sound; the gall-bladder more empty than usual. The left kidney was of a looser texture than natural, and a small abscess was discovered in it filled with pus. The bladder was empty, and exceedingly contracted. * The uterus was of the natural size, and its cavity exhibited no marks of pregnancy. The ovaria were somewhat enlarged, and the left contained several hydatids; but no corpus luteum could be detected in either of them. The heart and lungs, it may be added, were perfectly sound.

Enlargement of the Heart.

Mr Allan Burns, in his valuable work on the Diseases of the Heart (p. 41.) has attempted to establish the diagnosis between dilatation, or simple aneurism, of that organ, and the actual increase of its substance. In the latter disease, he has observed the pulse to be weak, irregular, intermitting, and fluttering; in simple dilatation, on the contrary, uniformly full, slow, and soft. The heart itself, also, when merely dilated, he has found to contract sluggishly and equally in the chest, without that jarring sensation, which the hand receives from its stroke, in cases of enlargement. This distinction, though it may perhaps have no im-

* No urine was voided after the third day; and on introducing the catheter repeatedly, the bladder was found empty. Suppression of urine (which took place also in Grice, from an over-dose of one of our most active diuretics), appears to be no uncommon effect of the administration of poisons. Vide Haller, Elem. vii. 396, edit. Lausan, 1778.

portant influence on practice, it may be interesting to try by the test of further observation; and the two following cases, as far as they go, are in favour of its accuracy.

1. Thomas Leech, aged 20, late a sailor in the Royal Navy, had laboured for nearly three years under palpitation of the heart and shortness of breathing. About two years before, he had been induced, by the urgency of his complaints, to desert from his ship, but had been taken, and sentenced to undergo the punishment of the fleet. His complaints, soon afterwards, increased so rapidly, that in a short time he received his discharge from service. When I first visited him, on the 23d of April 1809, as a home patient of the Manchester Infirmary, his situation was truly deplorable. The pulsation of the heart was felt as low as between the ninth and tenth ribs; was extremely violent; and was attended with that peculiar jarring, which has been described by Dr Ferriar, and other medical writers. The pulse at the wrist was 128, small and indistinct; the breathing laborious; and every attempt to lie down, brought on the sense of suffocation. He was obliged, therefore, to sit with his head reclined upon his arms, which were supported by a table. The belly was considerably swelled; the legs œdematous; and the urine scanty and high-coloured. He had a constant tendency to sickness, and frequently severe pain in the abdomen. His dissolution, indeed, seemed to me so near at hand, that I attempted nothing but to palliate the most urgent symptoms. On the 1st of May he died; and, with great difficulty, I obtained permission to inspect the body, which was done, under circumstances of haste and interruption from the young man's friends, by Mr Ransome, one of the surgeons of the infirmary.

On opening the thorax, the heart, from its enormous size, presented a very striking appearance. It completely distended the pericardium, to which membrane it had not formed any adhesion. There was no unusual quantity of fluid either in the pericardium or the general cavity of the thorax. The increase of the heart was general; but if any part was in excess, it was the left ventricle. When perfectly freed from blood, it weighed a pound and fourteen ounces, avoirdupois. The valves between the auricles and ventricles, and the semilunar valves, were perfectly natural; and the heart, in every respect, except that of magnitude, had a healthy appearance. The lungs were sound, and we could discover in the thorax no morbid structure, that could have presented an impediment to the circulation. The contents of the abdomen we were not permitted to examine.

2. William Barlow, aged 16, was admitted an in-patient of the Infirmary, under my care, on the 24th of December 1810. He dated his complaints from about a month previously to his admission; but it is probable, from the sequel, that the disease of the heart had a much earlier origin. At that time, he was seized suddenly with violent pain in the head, and lost the use of the right side. This, however, he soon recovered; but was attacked by a train of still more distressing symptoms. The belly and legs began to swell, and the breathing to be short and laborious. The œdema has now extended to the face, the eyelids, and the scrotum. He has a violent cough and spitting, and the lips have a livid hue. The palpitation of the heart is considerable, and the seat of that organ lower than natural; but the stroke is indistinct and distant. There is a visible pulsation of the veins of the neck. At the wrist, the pulse is small, irregular, rapid, and not always synchronous with the motions of the heart. The appetite is tolerably good; the bowels regular; and the urine natural in quantity.

Notwithstanding the plan of treatment, the most important part of which was the administration of foxglove, he became gradually worse, and died on the 14th of January. On the following day, the body was opened by Mr Ransome. The right sac of the pleura contained about a pint and a half of serum; and about nine ounces were found in the pericardium, which had no adhesion to the heart. The heart itself was enlarged, and the parietes of both ventricles were thicker than natural. In the left ventricle, the *columnæ carneæ* were in some places cartilaginous, and in others partially ossified. The right ventricle contained one of those substances which have been erroneously called polypi. But the chief seat of disease was in the right auricle and sinus venosus, which were dilated to twice their natural size, and were ossified in spots. All the valves of the heart, and those at the origin of the large arteries, were healthy. The weight of the heart was 14 troy ounces, perhaps double what it ought to have been in proportion to the size of the subject. * In the abdomen, the only deviation from a sound state of the viscera was an enlargement of the right kidney.

The pain of the head and paralysis (though not the subsequent removal of the latter), were satisfactorily accounted for on examining the brain. Its membranes were sound, and no hydropic effusion had taken place between them. But in the posterior part of the brain, immediately above the *cornu ammonis* of

* Vid. Senac, Traité du Cœur, i. 131.

the left lateral ventricle, an abscess was discovered, containing about two drachms of dark-coloured pus. The ventricles themselves contained, if any thing was remarkable, less than their natural quantity of fluid.

IV.

Case of Deformity of the Face and Throat from Burning, removed by Chirurgical Operations. By GEORGE NESSE HILL, Surgeon, Chester.

GENTLEMEN,

SIR JAMES EARLE, in his "Essay on the Means of Lessening the Effects of Fire on the Human Body" (1803), has given an interesting case of burnt throat, with an annexed drawing in profile, illustrative of the effects of a surgical operation upon the contracted parts. The subsequent narrative might, therefore, at first sight, be deemed an unnecessary repetition: but as that was a much less extensively mischievous accident than the one recorded below, and not requiring such extended means of relief, the relator hopes you will admit it into your repository of valuable communications; especially when he presumes to remind you, how interesting every case productive of a deviation from the common routine of practice, becomes to young practitioners, however diminutive may be the proportion of new or improved treatment. GEORGE NESSE HILL.

Chester, Dec. 31*st*, 1810.

A lively handsome boy, eight years of age, was one day standing alone near a large kitchen fire, when a sudden current of air from an open door at his back, drew his brat or pinafore to the bars of the grate, and set it in a flame. The garment being tied behind, and the fire ascending with violence in every direction, prevented the unfortunate little fellow from extricating himself, or obtaining assistance for that purpose, until his whole throat, from the breast bone, the chin, under lip, and left side of the face, including the eye and part of the forehead, were miserably scorched. Immediate surgical assistance being procured, the important parts thus injured were dressed in the usual manner, being, as in similar cases, much swoln and disfigured. In about nine months the whole hurt surface was cicatrized; during which arduous process, the throat, face, and eye, had gradually assumed the appearance attempted to be expressed by fig. 4. of the annexed plate;

the whole integuments, from the upper edge of the sternum to the chin, forming a hard ridgy band, near two inches wide, and which seemed to be every day bringing the lower jaw nearer to the breast, so as wholly to preclude the possibility of approximating the inferior to the upper lip: hence considerable impediment to the speech and a constant dripping of the saliva; a gradual thickening of the lower lip, together with a puckering-in of the left angle of the mouth; a dragging of the whole cheek downwards and backwards towards the left ear (which organ was shrivelled up), gave the whole face a singularly distressing appearance. The mischief was grievously augmented by a complete eversion of the inferior eyelid; and so firm were the parts beneath it become, that the eyelash lay fixed nearly flat on the cheek; the inner membrane forming, from the shape, and unyielding structure of its tarsus, an arched fold, tightly embracing the inferior portion of the globe, hence leaving it constantly exposed. Happily vision had received but little injury, a small portion only of the transparent cornea having suffered from the ascending flame, which had left a slight opacity, less detrimental than disagreeable; but the eye being incapable of closure, and the tears constantly trickling down the seamed cheek, rendered the sufferer extremely uncomfortable. Thus situated, he came to this city for advice, with a request to a resident relative to call a consultation on the case. The primary objects of surgical regard appeared to be to afford relief to the depressed jaw and distorted eye. The result of the consultation was a proposal to freely divide as many of the constricted masses of integuments and subjacent parts as would admit of such an operation, and effect the intentions indicated. The parents and child consenting, a day was fixed, and the first part of the business thus managed:—The hard band which reached from the chin to the sternum, being relaxed as much as possible, by bringing the head forwards and downwards, a large needle, having a considerable curve and cutting edges, was passed through the (comparatively) soft parts behind it, close to the trachea, from one side to the other, including as much lateral skin as possible. Upon this instrument, held firm, the burnt mass was with considerable difficulty divided by a scalpel; the needle being thus freed, a large vein and two arteries which it had cut were taken up, and the farther division of the skin, cellular membrane, and muscular fibres completed laterally, as far as was practicably safe. Thus the stricture was so effectually removed, that our little patient could shut his mouth again with ease; the left angle was also greatly relieved, and the eyelid visibly amended; but so painful and tedious had this operation been, and the loss of blood so considerable, that it was deemed prudent to

decline attempting more that day. The wound was dressed with a common dressing, and the head fixed as far backwards as possible, resting against a firm bolstered splint, which reached from the occiput to the coccyx; but in a few days, this method being found unsteady and incapable of admitting the head to be in every situation retained in that position, I contrived the machine, Fig. 6. from the girls' steel collar, which effectually answered. The wound healed smoothly in seven weeks, all contraction being removed, and but little hardness remaining. The head now resumed its natural position, and the thickened hard lip recovered its true situation, having become much softer. Notwithstanding which favourable change, the machine was still worn, night and day, without inconvenience, in order to keep the muscles and integuments of the throat as much as practicable upon the stretch. The folding or tucking inwards of the mouth, with the depressed and everted eyelid, now became the objects of further proceedings. Accordingly, the head being firmly fixed in the machine, and the heroic boy seated on the knee of an assistant, an incision was made upon the forefinger of the left hand, previously introduced into the mouth, reaching from near the angle of the lips to within a small distance of the ear, through a very hard, almost insensible, mass of scorched integuments, and carried downwards as deep as the parts would admit without dividing the internal membrane of the cheek: thus the puckering or folding inwards was removed, and a space gained sufficient to restore the injured eyelid about half way towards its true place. But in consequence of its long continued displacement, the membrane had become greatly elongated, and now formed a large fold, impeding perfect restoration. To remedy this defect, having a tenaculum in my hand, I pushed it through a semicircular fold of the superfluous part, which, by one stroke of a pair of scissars, was cut away, the lids now closing nearly as well as those of the uninjured organ, independent of any efforts of the patient for that purpose. Prepared sponge being inserted into the wound of the cheek, was suffered to remain there till ejected by suppuration: it cicatrized in about three weeks. To the eye a cold saturnine cataplasm was applied: it healed without trouble. But in defiance of all care, and the unremitted assistance of compresses, adhesive plasters, and bandage, the cheek was no sooner well than a dragging downwards of the lid became every day more evident, which pulled it into an arch or cuplike form here; the tears accumulated and ran over. My little sufferer viewing himself one day in a glass, pointed out where he felt the dragging or tightness at the side of the nose, and a less degree beneath the external canthus. Consenting to have it removed, I took a knife and made a semilunar incision from the

nose towards the temple, nearly down to the bone, and filled the wound with sponge tent. The eye was now completely closed, and covered with folded linen, wetted with cold saturnine solution. Upon the sponge coming away, the eyelid was retained by slips of adhesive plaster, carried up to the forehead. In three weeks this third incision was healed; the relaxed parts had greatly recovered their tone; the tears ceased to flow down the cheek, and the whole face appeared as represented by Fig. 5.

Should such an unhappy accident occur in my practice again, I would divide the band under the chin, by passing a curved sharp-pointed bistoury close behind it, and, bringing it forward through the mass at one stroke, complete this part of the operation in the manner I have long adopted for the removal of tumors, where the cellular membrane covering them still remains in a state admitting free motion of the integuments over the offending body. Whatever mode be adopted, certain it is, that in all operations where sound skin is to be divided, the operator can scarcely be too expeditious in executing his intentions.

Since transcribing the foregoing narrative from my notes, a case of extensive burn of all the right side of the throat, neck, and shoulder, has fallen under my care; the subject a fine, tall, thin girl, 11 years old, and it happened in consequence of setting fire to her tippet when alone up stairs. This garment being tied behind, she could not disembarrass herself from it without coming down for assistance. Cold water was liberally applied before my arrival, I found her quite easy, and directed a continuance of the water, during the preparation of a quantity of the potato cataplasm sufficient to cover the whole of the burnt parts. During the first 48 hours after the accident, these were occasionally renewed, and kept constantly cool by means of a sponge, imbued with the drainage liquor from the grated roots; subsequently a dressing of cerate, softened with sp. tereb. spread on the lint and covered by four-fold linen wetted with liq. plumb. procured an easy free digestion. But as the mischief was extensive, and the mastoid muscle much injured, I was very anxious to prevent contraction and wry neck. Accordingly, I fixed the head in a similar machine to that already described, only placing it anteriorly, with the semicircular part lowered by means of the screw (*a*), so as to fall under and preserve the chin in a state of constant elevation; by which method impending disfigurement was completely avoided, and smooth cicatrization obtained in ten weeks.

Explanation of the Plate.

Fig. 4. represents the deformity occasioned by the burn.

Fig. 5. the appearance of the boy after the deformity was removed.

Fig. 6. the apparatus used for retaining the head in a proper position.

a Screw to raise or depress the slide, in order to adapt the machine to various subjects.

b Band to embrace the pelvis, firmly buckling over the sacrum upon the iron work.

c Body of the machine, formed of firm iron, as trusses are.

d Iron plate with straps to keep back the shoulders.

e Strap to preserve the head steady backwards.

V.

Account of the good Effects from inhaling the Smoke of several species of Datura, especially the Datura Fastuosa, in Asthma. By Thomas Christie, M. D. Licentiate of the Royal College of Physicians, London.

As I find that the striking relief procured in spasmodic asthma from smoking the *datura stramonium*, has excited considerable attention, and that the practice is daily gaining ground in Great Britain, I think it will be satisfactory to your readers to be informed, that two other species of datura, closely allied to the stramonium, have for some time been employed in the same way in the East Indies, with perfect safety, and considerable success, for the cure of asthma.

For this purpose, I enclose short extracts of a correspondence with Dr William Hunter of Calcutta, which was commenced chiefly with a view of illustrating the history and treatment of the beriberi of Ceylon, or what I have called asthma hydropicum, and which I have the more carefully preserved, because part of the correspondence has already appeared in a book on the diseases of Indian seamen, published at Calcutta in 1804, by Dr Hunter, who has obtained my permission to publish the remainder, in a second edition of his work.

Previous to my leaving Ceylon in February 1810, I had employed the smoke of the datura, in a variety of cases of asthma, both in hospital and private practice; and in none of these did it ever fail to produce relief, when used before the accession of the paroxysm, or even after its commencement; but I am sorry to

say, that it did not often prevent the repetition of the fit, unless great attention was at the same time paid to diet and regimen.

Its immediate effects were a sense of heat in the chest, followed by expectoration, and attended frequently with temporary vertigo or drowsiness, and sometimes nausea; but it produced no other bad effect, although I have known several individuals, who had employed it for a length of time, and particularly a Mr Petitpas of Columbo, who had used it almost constantly for upwards of ten years.

Lieutenant Alexander, of the Bengal Infantry, who sometimes smoked the datura while in company, had a machine constructed of the nature of a hookah, for making the smoke pass through a body of water previous to its being inhaled, which did not appear to impair the efficacy of the remedy; and its use in this way might be the more advantageous, as the exertion required for making the smoke pass through the water, serves to draw it into the chest, which is generally the case in smoking the common Indian hookah.

The extract of datura stramonium has been used, on the authority of Stork, in insanity; and I understand that it has of late been employed internally with good effect, for allaying irritation in asthma, and other diseases of the organs of respiration; but I have had personally no experience of its use in this way.

Twickenham, 5th Feb. 1811.

Extract of Letters from T. Christie, *Superintendant of Hospitals in Ceylon, to* Dr William Hunter *of Calcutta.*

Columbo, Dec. 27th, 1807.

Lieutenant Alexander of your establishment, to whom I sometime ago recommended the smoking of the datura for asthma spasmodicum, tells me that its use in that form is not known in Bengal; although, as I first heard of it from Pondicherry, by means of some of the French and Dutch gentlemen here, I had conceived that its use was generally known throughout India.

Most of the people who, to my knowledge, have employed it, conceive they have received most essential benefit from its use; and Mr Ebert, a Dutch gentleman, informs me, that after having suffered much for two years from asthma, which seized him almost every night, he was induced to try the datura in 1805; since which time he has had almost a total exemption from the complaint, except when he takes wine or spirits; and even then, he can in general prevent any violent paroxysm, by having recourse to his favourite remedy.

He dries the roots in the shade; beats them so as to make the fibres divide, and cuts them into small pieces for use in a common

tobacco-pipe, the bowl of which he fills as with cut tobacco. When he has reason to apprehend a fit, he smokes at bed-time one or two pipefuls, drawing the smoke as much as possible into his chest, where it occasious some degree of heat, followed by expectoration. It also in general produces some vertigo; soon after which, he usually goes to sleep, and passes a good night.

From the description of its effects, and the known quality of that genus of plants, there can be no doubt that it acts as a narcotic; but from all accounts, it produces much more powerful effects in the disease in question than the smoke of tobacco, bang (*canabis indica*), or even opium; and is, I think, likely to prove a valuable remedy in spasmodic asthma.

As beriberi is sometimes succeeded by periodic fits of dyspnœa, resembling asthma spasmodicum, I shall take a favourable opportunity of recommending its trial in some such cases, and informing you of the result. The species commonly used here, is the *datura fastuosa*, cultivated in the gardens at Columbo, with a purple flower, and double or triple corolla; but the *datura metĕl*, which grows wild in great abundance in this neighbourhood, is, I understand, possessed of similar virtues.

Columbo, September 27th, 1809.

Agreeable to my intention, I have recommended the smoking of the datura in a few cases of beriberi, which had degenerated into periodic fits of dyspnœa, resembling spasmodic asthma; and although it has not, in any case of that kind, effected a complete cure, it ought I think to be kept in view, as a remedy which may be occasionally useful in that stage of beriberi.

VI.

Case of Fungus Hæmatodes, with Remarks. By Mr Robert M'Kechnie, Surgeon, Paisley.

April 30, 1810—Mrs Morison, aged 43, was admitted into the Paisley House of Recovery. In the beginning of last winter, she was attacked with acute rheumatism, for which she was repeatedly let blood, and a blister was applied to the right shoulder, the part most severely affected. By these and other means, the pains were removed. In January, a large indolent tumor suddenly formed in the right axilla; and immediately after a smaller one made its appearance on the side of the right mamma, next the sternum.

The former has continued stationary, but the latter gradually increased in size, though with little pain, and pointed like an abscess, the skin at the same time becoming greatly discoloured. On the 5th inst. the most prominent part of the skin cracked, and soon after a small fungus protruded. This has rapidly enlarged, and discharges an excessive quantity of a thin greenish fluid, occasionally mixed with blood. It is now about eight inches in circumference at its neck, and four inches in diameter at its most prominent part, which is much eroded by gangrenous sloughs being thrown off. The size of the tumor beneath is not changed since the formation of the fungus, and is as indolent, soft, and regular in its surface, as before the skin burst. By consultation it is agreed, that as the fungus is rapidly increasing; as the discharge is so immoderate in quantity, and fetid, that the general health must soon be impaired by it; and as there is no prospect of benefit from any internal remedy, no time ought to be lost in removing the various tumors. For, though this deplorable disease, when it has occurred in the breast, has in general terminated fatally, even after an operation, there are peculiarities in the present case, which render extirpation advisable.

1*st May.*—This afternoon, the whole diseased mass, with the mamma, weighing forty-two ounces, and extending from the axilla to the sternum, was extirpated. The patient sustained the operation with fortitude; little blood was lost; few arteries required to be taken up. The wound was dressed in the usual manner, and the patient walked to bed in the next room. After reclining a short time, the pulse was better than it had been for some days past. From the healthy appearance of the subjacent parts, after the disease was removed, and from the present condition of the patient, as flattering hopes of a cure are entertained, as our knowledge of the disease warrants.

On dissecting both tumors, they are found to be uniformly smooth on their surface, and to consist of a pulpy substance, somewhat firmer than brain, and of an ash-colour. Each was surrounded by a thick capsule, which seemed to have been formed of condensed cellular substance. The mamma was sound, but was connected with the tumor on it by a number of white bands, like the lactiferous tubes. The fungus had sprouted from the outer surface of this tumor, was spongy in its texture, and easily torn. A thin fluid oozed from the interior of both tumors when incisions were made into their substance.

5th May.—The patient had some rest during the night subsequent to the operation, and believed she would have slept longer, had she been permitted to lie upon the right side; as for a long time

she could sleep only in that position. On the morning of the 2d she had an inordinate craving for food, which she would not refrain from indulging. The wound feeling easy in the forenoon, she sat up in bed a short time. In the afternoon the pulse became quick and strong, the skin hot, the thirst great. By abstracting twenty-five ounces of blood, and sponging the skin with vinegar, the fever subsided, and the patient again slept tolerably well; but her appetite was so keen, that she was supplied with food during the night. On the morning of the 3d, she complained of an unquenchable thirst, and parched tongue. She felt no uneasiness in the wound: her pulse was moderate, and the skin temperate, inclining to moist. The bowels not being moved since the operation, castor oil was prescribed; it operated sufficiently, and abated the thirst. Strict injunctions against indulgence in eating were repeated. At ten o'clock in the evening, fatigued by the long confinement upon the left side, she attempted to turn round, and in the effort, felt a cold thrill along the line of the wound, and conceived it arose from a gush of blood. Afraid of bleeding to death, she despatched her husband for me; and on my arrival, I found her in a distressing state of trepidation, from a false alarm. Her pulse was small and frequent, and her skin hot: she had again been taking porridge. I assured her there was no probability of the wound breaking up, and inculcated to her the necessity of abstinence, from the risk of increasing fever. The attendants were prohibited from giving her any food till she should be visited next morning. About six o'clock in the morning of yesterday, my patient's husband came to inform me she had been delirious since her alarm, talking incoherently the whole night, and raving, especially about the operation, the wound, the disease, and requested laudanum might be given her. This I refused; and Mr Kerr and I soon after visited her. She was restless; her eyes were dull, the features were sharp, and the right cheek flushed. She lay upon her back; the hand of the diseased side raised to her head, with the arm almost out of the sling. The pulse was 144, and extremely feeble; the breathing laborious, the skin hot, and the tongue withered, with deep chops in it. When questioned, she distinctly understood us, and said she had no pain in the wound or elsewhere. A bason of panada stood ready for her as we entered; when this was prohibited, she appeared dissatisfied. The skin was sponged with vinegar; acidulated water-gruel was ordered for her drink, and a mixture with tartar emetic and the sweet spirit of nitre, was prescribed. She was requested to be kept quiet. In the afternoon I was hurriedly sent for, from the oppression at the precordia having greatly increased. Dr White did me the favour to visit

her with me immediately. She was evidently moribund; and in a few minutes after we left her, she breathed her last.

The body was inspected this afternoon. The wound adhered in many places; much pus was formed, and was collected in the cavity of the axilla, the most depending part after death. Gangrene had taken place superficially in the edges of the wound, near the sternum. No vestige of the disease remained for which the operation had been performed; the muscles were firm, and of a healthy colour. On opening the thorax and abdomen, the layer of fat between the skin and muscles was observed to be exceedingly thick; the heart was loaded with fat; the organs in the thorax were in other respects sound. A tea-cupful of bloody serum was taken out of the right cavity of the thorax; and on that side, the upper surface of the diaphragm was considerably inflamed, and tended to gangrene. All the organs in the abdomen were healthy, except the stomach, which was much inflamed in its internal surface, and so disorganized near its upper orifice, that the fingers readily penetrated it. Slight inflammation was discernible on the membranes of the brain; the brain itself was sound.

Remarks.

The above case of Fungus Hæmatodes is extracted from the journal of the House of Recovery, the histories in which are submitted to the inspection of the managers, previous to the admission of patients, and are not so minutely detailed as if they were intended solely for the medical reader. It may therefore be observed, that my patient was of the phlegmatic temperament; extremely corpulent; of an indolent, complaining disposition; accustomed to live as well as the limited income of her labouring husband could afford. She had born seven children, and continued to menstruate irregularly. The peculiarities alluded to, which rendered an operation advisable, were, the freedom from pain in the tumors, their moveable condition, and the facility with which the fingers could be got beneath them; indicating that little adhesion existed between them and the parts around. Notwithstanding these favourable symptoms, I confess I operated with considerable anxiety, because we were aware of the destructive tendency of the disease, and were not ignorant that the patient's fate had in general been accelerated by an operation, when the disease was situated on the head or trunk. To ensure success as far as possible, two semilunar incisions were made wide of the tumors; and they, the mammæ, and surrounding fat, removed together. The pectoral muscle was cleanly dissected; it was of a healthy colour, and no connexion could be traced be-

tween it and the tumor. The cavity of the axilla was carefully examined, and no remains of disease could be found in it. The arteries being tied as they were cut, no time was lost in bringing the lips of the wound into close contact, by sutures and intervening straps. Reflecting, after the operation, on the fortitude with which the patient had supported it, the healthy state of the subjacent parts, and the appearance of the morbid mass on dissection, my prospect of a cure was sanguine. It will therefore be readily conceived, how mortified I was at the suddenness of the fatal termination. For, however unsuccessful all the operated cases which I have seen or read of, except in the extremities, have ultimately been, sufficient time did not elapse to show the issue of this case. It is obvious, that death arose neither from the progress of the disease, nor directly from the operation accelerating its fatal crisis, but from symptomatic fever consequent to the operation. This, I believe, was aggravated by indulgence in the patient's voracious appetite, owing to a want of conviction of her dangerous situation, which all my endeavours could not impress upon her mind. I accordingly regret that her husband was allowed to attend her, as was done at her earnest request. It had been his practice to gratify her in all her wants; and at this important period he was averse to control her. I am sorry also I did not more early prescribe some remedy for the bulimia.

I hope there can be no doubt of Mrs Morrison's case being fungus hæmatodes; as the symptoms of the disease, and the medullary structure of the tumors, are so characteristic of its nature. Mr Wardrop, who has rendered the medical world an essential service, by the diligence with which he has collected, and the ingenuity with which he has arranged, so many facts upon this malignant disease, says of Mr Hey's three cases in the mamma, and his own two, "he would be led to doubt of the nature of the cases alluded to, had not fungous tumors arisen from the cicatrix." Though these cases did not in some respects exhibit the same characters as have been observed in other organs, may this not have arisen from the situation of the tumors, or other unknown circumstances in the history of this insidious disorder? Is it not probable that the consistence and progress of the tumors vary, according to the texture of the matrix in which they are formed, and the resistance they meet with in their growth? This thought occurred to me at the inspection of Dr Rodman's case, published in the 11th Volume of the London Medical and Physical Journal, and constituting Mr Wardrop's fourteenth case. I then remarked, that the tumor was almost as firm as cartilage in the orbit where it was contiguous to, or had eroded, the bones,

but gelatinous as it proceeded backward upon the brain. I have frequently made the same observation on the dissection of this disease in different situations; and in the case of Mrs Morrison, which was analogous to one of Mr Wardrop's, in not being seated in the gland of the mamma, the tumors were of a uniform pulpy consistence, and smooth surface, owing, perhaps, to their being enveloped by a bed of loose fat. I am convinced the tumor on her mamma would not have so soon adhered to the skin and burst it, had the part not been stimulated by various embrocations and poultices, recommended by her neighbours. Besides, several of the cases recorded by Mr Wardrop tend to support my hypothesis; and he himself remarks, at page 131, "The phenomena of the same disease vary more or less in every texture in which the disease takes place, though there are always some leading and prominent features, which give the peculiar character to the disease, in the organ it happens to be developed." In page 174, he says, "A very considerable difference may arise in the appearances of this disease in the different organs, the natural structure of the mamma being as unlike that of the sound eyeball or liver, as the same disease in these organs." May not fungus hæmatodes, or medullary sarcoma, be considered as generic terms, comprehending many varieties, in which Mr Hey's cases ought to be included?

As fungus hæmatodes is a disease of so frequent occurrence, as it is met with in so many organs of the human body, and as the treatment of it has hitherto been so unsuccessful, too great accuracy cannot be attended to in describing its history, tracing its causes, and marking its diagnosis; for by these means alone will such an obstinate malady be ever prevented or cured. From this persuasion, I have been as minute as possible in my detail of Mrs Morrison's case, and am sorry I am at a loss whence to derive its origin or cause. The patient received no external injury: owing to her late rheumatism she was closely confined to the house, and was well protected against the vicissitudes of the season by flannels. It is true she had been recently affected by an inflammatory complaint, at which time the blood drawn was covered with a thick buffy coat. I know not whether this attack could have had any influence in producing the subsequent disease; but all the cases of fungus hæmatodes which I have seen, have followed external injuries or inflammatory disorders in the vicinity. Of these I shall only mention the following.—I was, last summer, present at the dissection of the body of a middle-aged man, who died of a disease in the pelvis. The rectum was the chief seat of the disorder, and was surrounded by a cluster of pulpy tubercles, which, as high as the sigmoid flexure of the co-

lon, were soft like custard. Near the anus, the gut, prostate gland, and posterior surface of the bladder, were conglomerated into a pretty firm ash-coloured mass. My friend, Mr Kerr, under whose care the patient was at his death, informed me that he was troubled with dysentery fifteen years ago, and was ever after subject to inflammatory attacks in the lower part of the abdomen. Within six months of his death he was cut for fistula in ano.

I was also present, a few days ago, while my friend, Dr Wylie, examined the head and throat of a girl who died from a large tumor in the fauces, after it had made extensive ravages upon the bones at the basis of the cranium, and filled the left cavernous sinus. Ten weeks previous, the tumor was attempted to be extirpated, from a belief that it was steatomatous; but, on removing what was anterior to the velum, it was discovered that another lobe ran up towards the nostrils, and into the pharynx, adhering to the mouth of the left eustachian tube. Farther efforts to extirpate were therefore desisted from. The tumor increased rapidly after the operation, and so filled up the pharynx, that the patient died partly from inanition. This case succeeded an attack of cynanche tonsillaris, attended with deafness in the left year, brought on 12 months ago by cold applied to that side of the head. The above cases are so important, that I trust the gentlemen who treated them, will be induced to publish a detailed account of them.—The following case of diseased bladder and uterus, which resembles, in several particulars, that of Mr Burns, mentioned by Mr Wardrop, presents such an anomaly in the history of fungus hæmatodes, that I make no apology for stating it at length. The patient was about thirty-five years of age, the mother of two children, and of a healthy constitution. In April 1809, she was seized with violent abdominal inflammation; she recovered by the usual means, but continued delicate till the following January, when she was again attacked with the same complaint in the lower belly. The most troublesome symptom she had was a painful micturition, which harassed her for a long time after the violence of the inflammation subsided. The bladder at last burst, and the micturition ceased; but, by the constant dribbling of the urine, the adjacent parts were greatly excoriated. When I was called to attend her in August last, she said her neighbours were of opinion she laboured under cancer of the womb. She had not menstruated since her illness in January. Frequent severe lancinating pains were felt in the loins and over the pubes; acute pain was also occasioned in the vagina by voiding feces. The excoriation of the external parts caused so much torment, that, on attempting to introduce my finger to discover the state of the parts within,

she screamed, and obliged me to desist. She swallowed daily an ounce of laudanum to alleviate her distress, which, for several months, scarcely allowed her to lie in bed. Worn out by unremitting pain, her whole body became anasarcous, and she died a few weeks ago. On opening the abdomen, and removing the intestines, which were slightly inflamed, the uterus and left ovarium were perceived to be much enlarged. The ovarium was soft, and contained about two ounces of a grumous-looking pus. The uterus adhered extensively to the rectum. This attachment being separated, the uterus, vagina, and bladder, were extirpated together. The vagina and bladder were only one cavity, black and sloughy. The os tincæ was natural, and the cavity of the uterus was so contracted, that a moderately sized probe could not be introduced. The uterus was of a regular shape, and a schirrous hardness. To examine its texture, a longitudinal incision was made in it; it was equally hard throughout, except to the right side of its cavity, where a small tumor, of the size and shape of a woman's thimble, lay imbedded in its substance, and was surrounded by a capsule, which adhered to the uterus, by such slender filaments, that they were easily separated by the handle of the scalpel. This tumor was at first observed, by its appearance being contrasted with that of the uterus; the uterus was of a flesh colour; its texture hard and granulated; the tumor was white and glossy, like the medullary portion of the brain, but firmer in its texture, which was divided into four lobules by thin membranous septa. *

I acknowledge, though the fact were true that fungus hæmatodes always succeeds inflammation, no proof is adduced that any necessary connexion exists between them; for, as Mr Wardrop remarks,—" in the investigation of the history of diseases, we are too apt to attempt to find out their exciting causes, and to attribute them to fortuitous events." If inflammation necessarily precedes fungus hæmatodes, what change of structure must take place, or what modification in the arterial action must be effected previous to the formation of the new disease? what constitutions are most susceptible of the change? what influence has the treatment of inflammation in exciting or preventing the change? These, and may other questions, must be answered,

* I am just now reminded of a case, similar in one respect to the above, which I saw several years ago. The patient was a pregnant woman, who had reached her full time; the placenta adhered to the os uteri, and she died, undelivered, from flooding. On opening the body, besides the usual appearances, a firm tumor, and regular in its surface, was found in the substance of the dilated uterus, near its fundus, to which it was loosely attached. It was of the size of a hen's egg. Of the previous history of the woman, I am ignorant.

before one disease ought, with justice, to be assigned as the cause of another.

Respecting the diagnosis of fungus hæmatodes, it is to be lamented, that a disease, so different from cancer in its phenomena, should have been so long confounded with it. The judicious comparative view of the predominant features of both these unmanageable disorders, with which Mr Wardrop has favoured the world, removes the obscurity in which fungus hæmatodes has been hitherto involved. There is one peculiarity which he mentions in treating of this disease in the extremities and testicle; but has omitted, in the comparative view, where it should have been enumerated, as it is more characteristic of the disease in the external parts of the body than any other symptom; I mean the appearance of the tumor immediately before the skin cracks. The puckered skin, the numerous contorted veins, and the hard knobbed feel of cancer, upon the eve of ulceration, are very different from the purple hue, the projecting surface, and the smooth elastic feel of fungus hæmatodes in the same stage, which so much resemble the symptoms of common abscess, that a lancet has not unfrequently been plunged into the tumors, with the vain hope of discharging their contents. This was done in Dr Rodman's case long before it came under his care. I knew it done in the thigh, where a fungus quickly arose; and had it not been for the timidity of Mrs Morrison, I believe I would have punctured the tumor on her mamma a few days before it burst. After ulceration, the rapid formation of the fungus is another characteristic of fungus hæmatodes, distinguising it from cancer: In the latter, a firm fungus occasionally, but slowly, forms; in the former, a spongy fungus almost universally and rapidly sprouts forth. Another diagnostic is the rapid increase of the one, and the slow progress of the other; for, in numerous instances, fungus hæmatodes destroys in as many months as cancer requires years. This rapidity is observable in a number of Mr Wardrop's cases, and is particularly taken notice of by Mr Wishart in the last Number of the Edinburgh Medical and Surgical Journal. Lastly, I am disposed to believe, there is less tendency in fungus hæmatodes to contaminate the glands *in the course of circulation*, than in cancer. It is well known, that in cancer there is no consequence more common; whereas, I have only once seen it in fungus hæmatodes.

Paisley, 8th February 1811.

VII.

Case of Splenitis Acutus, in which the Serum of the Blood drawn from the Arm had the appearance of Milk. By P. Cullen, Esq. Surgeon, Sheerness.

I beg leave to communicate to you a very singular circumstance, which lately occurred to me in bleeding a patient labouring under splenitis acutus. The serum of the blood was *white*, exactly in colour and consistence like milk, with the crassamentum floating in it, which was cupped and sizy. This patient was bled *five* successive times. The three first bleedings exhibited the same kind of serum as abovementioned; but the two last were natural in appearance. I sent a vial containing some of this serum to Mr Brooks, lecturer on anatomy, &c. in London, who showed it to Dr Hooper; and this latter gentleman found it to consist almost entirely of coagulable lymph. I have some of the same serum still by me, which, though drawn from the patient in November last, is still unaltered in its appearance, except being a little thicker, and it emits but very little fetor. I have subjoined a few particulars of this case, which I hope will be found interesting.

The subject of this singular occurrence is a Thomas Halke, labourer in his Majesty's Ordnance at this place, aged 35, of a thin spare habit of body, and sallow complexion, addicted (moderately) in the early part of his life, to spirituous liquors; latterly to ale or porter.

He first of all complained of a pain of his left side, on the 14th of June ult. (1810), which appearing then more of a spasmodic than inflammatory nature, was treated with aperients, fomentation, and volatile liniment, to which it yielded in a few days. He was not bled at this time. Since that, he says, he had been subject to frequent loose stools, and transient pains of the same side; but not so much as to require medicine. From his account, the stools must have been of the dysenteric kind.

Nov. 24th, (1810.)—In the morning, he came to my house, complaining of a return of the pains of his left side; and, recollecting the former treatment, I ordered him immediately an aperient draught of the pulv. jalap. comp., a fomentation, and volatile liniment. In the evening, I was sent for to his lodgings. The draught had operated; the fomentation, &c. had been used: he was, however, much worse. The pain was very severe, and

chiefly seated about the middle of the left hypochondrium, extending forward as far as the cartilago ensiformis, and backward to the vertebræ. There was little or no tension of the part; but the pain was increased on pressure made all along the edges of the costæ spuriæ. He was bent forward, and lying on his right side; nor could he be removed from that position, but with increased suffering. From his first attack, in June, he said he could never lie easy but on his right side. He had neither nausea nor vomiting; neither dyspnœa nor cough; and the right hypochondrium was free from any uneasiness. There was no manifest enlargement of the spleen, but all the symptoms were evidently referred to the region of that viscus. Symptomatic fever had taken place. He was bled immediately to the extent of 14 or 16 oz. The blood flowed in a *full* and *florid* stream; but, on reaching the bason, I was surprised to observe a whitish appearance, forming like a cloud on the surface of the blood, which made me suppose that there had been some milk in the bason; but I was soon satisfied to the contrary. The bleeding gave some relief. I ordered him the pulv. antim. with nitre and digitalis in powder; the mist. salin. and fomentation and liniment to be repeated. Before I left the room, I was astonished to see the serum like so much milk, with the crassamentum floating in it.

Nov. 25th.—This morning I found the blood as I had left it, with the crassamentum cupped and sizy, of a darkish colour on its under surface, and loose in its texture. The pain had returned. He was bled again to the same extent, and with exactly the same appearance of white milky serum, and cupped sizy crassamentum. Contin. med. et applic. empl. lyttæ lateri dolenti. In the evening, the pain continuing, he was bled the third time, to the extent of about 12 oz. which exhibited the same phenomenon. By this third bleeding he was much relieved. Contin. med.

26th.—This day he was so much better, that it was not necessary to bleed him. The blister had taken full effect.

27th.—Having some return of pain, he was bled the fourth time, to about 10 oz. The blood had now a very different aspect. The serum was clear, except a little tinge of yellow in it; the crassamentum less cupped, and less sizy; also more florid in colour.—Contin. med. &c.

28th.—The pain not being entirely gone, he was bled the fifth time, to about 8 oz. which had quite a natural appearance, the crassamentum neither cupped nor sizy. Contin. med. pro re nata.

After this he continued to mend gradually; and as soon as the inflammatory symptoms were entirely subsided, I thought

proper to put him under a gentle course of calomel, which I did. He is now quite recovered, and seems to enjoy altogether better health than before his indisposition. Whilst he remains here, I shall keep my eye upon him, and particularly attend to any of his future ailments. I examined his left hypochondrium lately, but could not discover any enlargement of the spleen. The climate of Sheerness being low and marshy, causes intermittents to be endemic here; so that I daily meet with cases of splenitis chronicus, and sometimes splenitis acutus, as sequelæ of these intermittents, but have never witnessed any milky coloured serum before; nor has any of the medical practitioners here.

P. S.—I forgot to mention, that the day after it was taken, the white serum was tasted, and gave the sensation of an emulsion made with volatile alkali. May it not be inferred, as very probable, that this uncommon appearance may be owing to a rapid absorption of fat, more particularly from the omentum becoming miscible with the aqueous part of the blood, by means of some portion of ammonia, or volatile alkali, present in that blood, thus forming a kind of natural emulsion? Only, this does not coincide with Dr Hooper's experiment, above related, whereby he says he found it to consist almost entirely of coagulable lymph.

Sheerness, 20th February, 1811.

VIII.

Fatal Effect of Eau Medicinale. Communicated by JOHN RING, Esq. Member of the Royal College of Surgeons in London.

MR SMITH, of Bishop's Yard, Charles Street, Grosvenor Square, 65 years of age, was troubled with the gout when 12 years old, and, in general, had it twice a year, for the last 25 years. He frequently had it in his stomach, as well as in his limbs.

In the Spring of 1810, he took half a bottle of the eau medicinale, which operated as a cathartic, and, in the space of twelve hours, he was much relieved.

On Sunday the 25th of November, he was seized with the gout in his foot, but was not confined to his bed. On Wednesday, the 28th, he took half a bottle of the eau medicinale, which operated violently as an emetic, and cathartic, and a sudorific.

On Thursday his foot was well; but he complained of a pain in the pit of his stomach, which he could cover with his finger. This increased till five o'clock, when it became very violent, and continued so during the night, alternately affecting his stomach and his bowels.

On Friday the pain gradually abated; on Friday night, the black vomiting came on; and on Saturday afternoon he expired.

The medicine which seems to have proved fatal in this case, was bought at Mr Befort's in St James's Street; and there is no reason to doubt that it was genuine. The mischief seems to have been occasioned by the patient's taking a larger dose than his constitution could bear.

The printed paper accompanying the eau medicinale, directs laudanum to be taken when the operation is too violent; but this he neglected.

New Street, Hanover Square,
January 31, 1811.

IX.

Observations on Dysentery, as it occurred on Board his Majesty's Ship ———, on her Voyage to Bombay, and the good Effects of Mercury in it. By R. N. Assistant-Surgeon, Royal Navy.

It is not my intention at present to take notice of any of the diseases which took place amongst us, except dysentery. When we left Spithead, in April 1809, our ship's company were in excellent health, not so much as a febrile disease amongst us; and we continued so until we got into the Tropic of Capricorn, when we had three cases of dysentery. Upon our arrival at Bombay, on the 10th of September, the termination of the rainy season, the dysentery, in a few days, began to make its appearance amongst us. The disease, in general, began with loss of appetite, nausea and vomiting, with a sense of weight about the stomach, and hypogastric region. These symptoms preceded the disease for a longer or shorter period, according to circumstances, when the patient began to complain of frequent purging of mucus, accompanied with tormina and tenesmus. By degrees the stools became more frequent, mixed with blood, and the tormina more severe, with a constant tenesmus. In many cases

the stools consisted entirely of blood, which rendered the patients unable to turn themselves in bed without assistance. Fever sometimes preceded the dysentery; at other times the fever seemed to be symptomatic, supervening upon the dysentery. In none of the cases did the patients betray the slightest symptom of an hepatic affection.

Supposed Causes.—Intemperance in spirituous liquors, indulging to excess in fruit, especially pine-apple and plantain, exposure to the night dews, and, above all, the noxious effluvia which were exhaled from the filth on shore, and perhaps contagion.

Treatment.—On the patients complaining, a pill containing eight grains of calomel was administered as a cathartic; and about six hours afterwards, we began by giving the patients three grains of calomel, with half a grain of opium, every four hours, till such time as the system came under the influence of the mercury. When this effect was produced, all the dysenteric symptoms invariably began to subside; the quantity of calomel was then lessened; only as much was given as we thought would keep the system under its influence, till the disease subsided entirely; about two grains morning and evening were, in general, found sufficient. The irritability of the intestines is thought by some to be an argument against the use of calomel. In my opinion, it is the only remedy for subduing that morbid irritability; for no sooner has the system come under the influence of the calomel than the irritability ceases. In chronic cases, a combination of calomel, ipecacuan, and opium, in the proportion of one grain of calomel to five of the ipecacuan, together with one quarter of a grain of opium, was administered morning, noon, and night. Blisters applied to the hypogastric region were often of singular service in chronic cases. We had three cases of dysentery on our outward-bound passage; thirty-four during our stay at Bombay, which was five months; and eight on our passage to England, all successfully treated in the manner above mentioned. An accurate journal was kept of every case which occurred; and I can vouch for the accuracy of the above statement. Besides being an eyewitness, I have not been more successful than other practitioners who have followed the same mode of treatment. A physician who practised in India for above twenty years, first suggested the above method of treatment to me before I left England. From the very high encomiums he bestowed upon it, I determined to put it in practice the first opportunity. The above statement will enable you to judge whether or not I have been successful. If you deem these unconnected observations worthy of insertion in your valuable and widely cir-

culated Journal, you will confer an infinite obligation on me by so doing.

Spithead, Dec. 14. 1810.

X.

A Case of Rupture of the Lungs in Parturition. By Mr William Balfour, Surgeon, Edinburgh.

On the 9th of November, between five and six in the afternoon, I was called in a great hurry "to see a woman taken very suddenly ill." On entering the house I found a woman in labour. She was twenty-five years of age, and it was her first child. A gentleman was in the act of bleeding her; and the women present were piteously bemoaning her situation. The patient herself was taking leave of her friends, expecting every moment to be her last. Having with difficulty procured silence, I demanded the cause of my being sent for? The midwife and gentleman, who, it appeared, had been present from the beginning, declared "the cause of their apprehensions to be a swelling of the face that had come on instantaneously; that labour had commenced at eight in the morning; that little or no progress had been made; and that if the woman was not delivered instantly with the *forceps* she would inevitably die." I immediately examined, and found every thing as I could have wished, the os tincæ one third dilated, and the presentation perfectly natural. Instantly I told the patient to take courage; that there was not the least cause for alarm; that the swelling of the face would subside upon delivery being accomplished, which would be in less than an hour, as every thing about her was in the state it ought to be. Upon a little observation, I found the woman acted in the belief that her own *voluntary* efforts were to propel the child. Accordingly she made the most gigantic exertions, not only during a pain, but after the pain had entirely gone off. To this I attributed the protraction of labour, and swelling of the face, from which so much was apprehended. The midwife, indeed, now informed me, that from the commencement of labour, the patient, notwithstanding every remonstrance and direction, had behaved in the most frantic and ungovernable manner, putting herself in attitudes the most unlikely to facilitate delivery, and acting altogether in the most preposterous manner.

The pains were, of course, incessant, harassing, and quite inefficient; so much so, that progress seemed to be altogether arrested, chiefly, as appeared to me, from complete loss of confidence that had taken possession of the patient's mind, in her midwife. I now cautioned the patient against using any voluntary exertion whatever, directed her to lie as quiet as possible during the absence of pains, which, if she did, would, I assured her, recur at more stated intervals, and with much greater effect. I told her that, in her case, nature was quite sufficient to do her own work, without the interference of art, and that I should see her delivered before I left the room. The effect these assurances had on the patient's mind was truly astonishing; not a pain succeeded but what was sensibly efficient; and the woman was delivered within forty minutes from the moment I saw her. Never was there a better illustration of the justice of Dr Hamilton's doctrine, "That whenever a patient loses confidence in a practitioner, that practitioner, if possible, should retire." In introducing this observation, however, I lay claim to not the smallest particle of merit. All the good I did consisted in the prevention of mischief, by unwarrantable interference. Delivery being accomplished, the tumefaction of the countenance instantly and visibly subsided; a circumstance that led me to suppose the observation of the attendants not very accurate as to the time it took place. Indeed, I had hitherto paid no attention to any thing but delivery, trusting that the appearance of the face was the effect of great exertion long continued; at any rate, labour being the cause, delivery, as removing that cause, demanded primary consideration. As soon, therefore, as the placenta came away, I left the patient in charge of the midwife, but was not gone more than twenty minutes, when I was again sent for. I found the patient talking as at first, rolling and tossing. The countenance was now much swollen, but especially the upper eyelids. Pointing to the bronchia, she complained of a sense of suffocation, of swelling about the neck, and soreness in the right side of the thorax, towards the upper and back part. I took her right arm into my hand to feel her pulse, when I was astonished at the *sub manu crepitans*, which I distinctly felt. The whole arm, the shoulder, neck, and face, the only parts as yet affected, exhibited the same unequivocal sumptoms of emphysema. The upper eyelids pressed so hard upon the eyes as to occasion pain. I made six or eight punctures in them, from which, in a very short time, so much air was extricated, that the patient declared she could look up. I now endeavoured to convince her of the necessity of perfect rest and quietness; directed her never to move but in the most slow and cautious manner,

and not at all but when she could not avoid it; and never to make any exertion that required a full inspiration. Accordingly I did not exhibit an opiate, as her bowels were not previously cleared, but ordered a gentle dose of castor oil, which was not given her. Next morning the tumefaction of the countenance was not increased—the sense of suffocation had abated. The air had insinuated a little way only down the thorax, to the elbow of the left arm, and to the finger-ends of the right, but there was no visible tumefaction of these parts. A moderate dose of castor oil was ordered. In the evening, the face was visibly regaining the natural appearance—the physic had operated gently. Next morning the countenance was much amended, the original pain at the top of the chest was not felt, and no more air seemed to have been effused. I declared the patient in a hopeful state, but that the precautions formerly inculcated should be observed for some days longer. I was now desired to send in my bill, which hint I understood; and therefore, to the directions formerly given, added that of frequently using friction with flannel over all the emphysematous parts. I did not see the patient again, but was informed by the midwife, that she continued to mend steadily, without the least accident occurring; that after every sleep, and profuse perspiration, there was a visible melioration of appearance, and that, on the twelfth day from delivery, she undertook a journey to the Highlands.

Thus terminated this singular and interesting case. It appears, from the feelings of the patient, that the rupture must have been in the right lobe; and very probable that it was precisely where the bronchiæ terminate in cells. From this situation the air would easily find its way upwards through the space in the posterior mediastinum, in which the under end of the trachea, œsophagus, arch of the aorta, &c. are enclosed. The orifice must have been but small, otherwise the tela cellulosa would have been more generally inflated.

XI.

Case of Fluor Albus cured by the Exhibition of Tincture of Cantharides. By Mr George Forbes, Surgeon, Kennoway.

If you deem the annexed case worthy of a place in your valuable Journal, you may insert it. The practice, it is true,

has not novelty to recommend it, yet an accumulation of facts cannot be altogether useless.

Mrs A., *æt.* 22 years, the mother of two healthy children, soon after the commencement of her first pregnancy, was affected with *fluor albus*, which gradually increased. About the beginning of last March, she became affected to that degree as to incapacitate her for looking after her family concerns. At this time I was first consulted. I tried in vain for two months the medicines usually prescribed in such cases, such as tonics internally, cold-bathing, nourishing diet, rest, &c.; notwithstanding which my patient got worse daily. Recollecting Mr Roberton's paper on the internal use of tincture of cantharides, published in the 6th Number of your Journal, I resolved upon giving that medicine a fair trial; and its success has exceeded my most sanguine expectations.

At my commencement with the cantharides, (May the 4th), my patient could neither sit nor walk, without occasioning considerable pain; the external parts of generation were much swelled, and very painful; one of the inguinal glands on the right side was swelled to nearly the size of a pigeon's egg, red and painful. She complained of great pain in the back, debility, appetite much impaired, thirst considerable, bowels costive. Six months ago she weaned her youngest child, since which period the catamenia have kept regular, and in the usual quantity; before and after the appearance of these, the discharge is increased in quantity, and of a more acrid quality.

To take ten drops of the tincture of cantharides every six hours, and two aloetic pills at bedtime; a nutritious diet still enjoined.

6*th.*—Has taken the medicines as directed; symptoms much the same as at last report. The pills have had no effect.

To take immediately ol. ricini ℥ss; tincture to be continued. No pills to be taken to-night, unless the oil does not operate; to-morrow night to take three.

9*th.*—Oil produced two stools, and on the 8th had another; thinks the discharge puts on a whiter appearance, and thicker; external parts, if any thing, more painful. Bubo said to be smaller and less inflamed.

To continue the tincture and pills.

11*th.*—Complains to-day of great pain in the uterine region, pain in the back diminished, bowels regular, discharge whiter and of a thicker consistence, quantity supposed to be a little diminished; frequent desire to void urine, attended with slight pain.

℞ Sulph. alumin. ℥vi.
Solv. in aq. font. ℥xij.

To be injected into the vagina three or four times a-day, with a female syringe; tincture and pills to be continued.

14*th.*—To-day the bubo is almost gone; strangury considerable; pain and swelling in the external parts nearly gone; discharge very much diminished; what remains is very white, thick, and ropy; bowels rather lax; pain in the uterine region increased.

Continue the tincture and injection, but discontinue the pills.

17*th.*—Strangury and pain in the uterine region increased to such a degree as to be almost insufferable; discharge was increased yesterday, owing, she thinks, to walking a good deal through the house, but has again returned to much the same state it was in at last report. Bowels regular.

24*th.*—Since last report she has gradually got free of all her complaints. Strangury and pain in the uterine region went off next day after leaving off the tincture. Bubo, pain, and swelling in the external parts entirely gone; thinks herself better than ever she has been since the commencement of the disease. The catamenia have been absent six weeks.

It is now upwards of six months since Mrs A. left off taking medicines, since which period she has never had the smallest symptom of relapse; except about two months ago, after undergoing immoderate fatigue on horseback, she had a slight discharge for three days, which disappeared without her taking any precaution to prevent it. The catamenia returned after being absent two months.

Kennoway, Dec. 20. 1810.

XII.

Case of Suppression of Urine, from inflammation of the Neck of the Bladder, brought on by the improper use of Injections, and cured by the use of Camphor. By Mr Hamilton Baillie, Surgeon, R. N.—Communicated by Charles Queade, Surgeon, R. N.

William Bapple, seaman, 21 years of age, and of a full plethoric habit, complained, on the 20th of January 1807, of gonorrhœa, attended with nothing unusual, for which he was freely and repeatedly purged; and as, three days afterwards, no symptom of inflammation appeared to exist, he began to use a weak solution of sulphate of zinc, which greatly decreased the gonorrhœal discharge. On the 28th, he began to complain of almost constant inclination to void his urine, which was ejected in

very small quantities, with violent pain in the perinæum, extending along the urethra to the glans penis, and other symptoms of dysuria, accompanied with a full hard pulse, thirst, headach, and other febrile symptoms. He was bled twice on the 28th, to the extent of sixteen ounces each time; and once, on the 29th, when twelve ounces were taken from the arm. His bowels were kept open by the ol. ricini and emollient injections; the lower part of the abdomen and genitals were fomented; and he had an infusion of semen lin. for common drink, every thing stimulating being prohibited.—A diaphoresis was also kept up by the pulv. ipec. comp. On the 31st the warm bath was used several times, without effect, and several unsuccessful attempts were made to introduce the bougie and catheter. Cold applications to the lower extremities were tried, but found of no avail. He continued very restless all night, and complained of much pain in the hypogastric region, which had become very tense; but the pain in the perinæum, and desire to void urine, had nearly left him. At four o'clock in the morning of the 1st of February some delirium came on; the pulse was very feeble, and considerably above 100; tongue dry and foul; and some paralysis of the lower extremities. As the inflammation at the neck of the bladder appeared to have subsided, I had now no doubt of being able to introduce the catheter; but the patient having suffered so much from the former attempts, would not submit. Mr Thomas King, assistant surgeon, recollecting a similar case in which the camphor had been successfully employed, proposed a trial of it; and it was accordingly given, in doses of ten grains every hour. A few minutes after he had taken the third dose, an involuntary discharge of urine took place, the pulse becoming fuller and slower: and by the time he had taken the fifth dose, several pints of urine, the greatest part discharged involuntarily, were voided. The camphor was then discontinued, and in a few hours every unpleasant symptom disappeared.

On the modus operandi of the laur. camph. I am almost afraid to offer an opinion. I am however inclined to think (contrary to the high authority of Dr Cullen), that it acts as a stimulant; and I am further led to this belief, from its well known effects on the uterus, when the action of that organ has been suspended by opium, profuse hæmorrhages, or any other cause, during parturition: and for this purpose it has for many years been successfully employed by the present professor of Midwifery in the University of Edinburgh. That it would have answered any good purpose in the beginning of the disease, I am strongly disposed to doubt; for although it has been generally recommended in strangury, brought on from the use of cantharides, it has been often found to answer no good purpose: and by Dr

Heberden it was even said to occasion the disease. Is it not probable that it stimulated (in this case) the detrusor urinæ to action, which had been weakened by over distention?

XIII.

History of Three Persons who were nearly suffocated, and of One who perished, from the irrespirable Gases arising from a Coal Fire. By DAVID KING, M. D.

ON Tuesday, 18th November last, a fire was kindled in the hold of a vessel lying in this harbour, in order to dry some wet sails, and to make it more comfortable for the people that were doing some work there. In the evening the fire was perfectly extinguished, and the captain gave strict orders for the hatches to be left off, till about the time the crew should go to bed. His injunctions, however, had unfortunately not been attended to; the hatches were put on, and the vessel was shut up till eleven at night, when the crew got into their usual births. The mate slept in the cabin, and two boys, M'Ilraith and M'Dillon, and an elderly man, Thomas Leslie, slept in the forecastle; both of which stations are separated from the hold only by a partition of wood. None of the people felt any thing disagreeable; and on that account they shut up closely both the cabin and forecastle. Leslie slept in the same birth with M'Dillon, who unfortunately perished, the former at the fore and the latter at the back part of the bed; and the other boy, M'Ilraith, lay in a bed by himself.

The captain was surprised to find, when he came on board, about half past seven the following morning, the crew all in their births, and the vessel shut up. He went to the mate, to inquire of him the cause. The mate, who was very listless, told him that it was not drunkenness; but he could not account for the great debility and pain he had in the small of his back, and in his lower extremities, and begged the captain would allow him to remain in bed a little longer. The captain suspecting, notwithstanding the mate's assurances to the contrary, that it might be the effects of drunkenness, gave his consent. He then went down to the forecastle, and there he found M'Ilraith lying upon the floor, who uttered a peculiar kind of cry upon touching him, and the other two in their births. He, however, did not at all examine them minutely, but found them unable to speak, and, as he supposed, dead drunk. The captain related the conduct of his crew to some seafaring people on the quay, and prevailed upon them also to go down, who all considered the crew in a fit

of intoxication; and they thought, therefore, the best plan was to allow them to sleep it out.

Accordingly, they were left from that time till half past one o'clock P. M., when the captain suspecting something very remarkable in their drunkenness, from their being all in a similar state, and none of them getting any better, thought it prudent to have them brought on deck.

But it was now too late; for in one, M'Dillon, the vital spark was gone, and his bedfellow, Leslie, was nearly lifeless. The boy, M'Ilraith, was scarcely able to utter a strange cry, and the mate, who was in the cabin, to be made sensible of his situation.

The whole were removed to a house a few paces from the quay; and in a few minutes I saw them.

M'Dillon had great suffusion of the face, neck, and upper extremities, which were tumid, and pitted on pressure. The eyes were turgid, but retained nearly their lustre; the lips were black, and the teeth of the lower jaw immoveably clenched against those of the upper. The extremities were cold and rigid; the fingers and toes were curved inwards, as in severe epileptic fits; the nostrils seemed dilated, and drawn a little upwards, and were filled with a thin bloody froth.

The windows and doors of the room were thrown open; the lungs were repeatedly dilated, by means of a quill put into one nostril, whilst the other and the mouth were shut; and pressure was made upon the larynx, to prevent, during the inflation, any air from getting down the œsophagus. By this artificial respiration, a great quantity of a mucous froth came from the nostrils. A vein was opened, but no blood came. Frictions, and the application of warm irons and flannels were also had recourse to; but every attempt to restore animation proved fruitless.

——— Leslie had also considerable suffusion of face; his eyelids and mouth were closely shut, and his breathing, which was interrupted with sobs, had a peculiar rattling noise. His pulse was small, and about 96; his toes and fingers curved, his joints all inflexible, and his extremities somewhat cold.

Cold water was dashed upon his face, and hartshorn rubbed about his mouth and nostrils, and volatile salts were occasionally applied to his nose; all of which caused him, after a little, to corrugate his face, and to make fuller inspirations. Warm irons and flannels were applied to his lower extremities, and an enema, composed of 1½ drachm of hartshorn, in about 1½ gill of warm water, was administered with considerable difficulty, from the contraction of the sphincter ani, and the rigid state of the thighs. About eight ounces of blood were taken, without any apparent effect on the pulse. His mouth was forced a little open with the

end of a spoon, and a little warm wine and water given, but was swallowed with considerable difficulty. As soon as the warm bath was gotten ready, which was in half an hour, he was immersed in it, with the head a little raised, for about ten minutes, when his pulse became fuller and stronger, and his joints more flexible. He seemed, however, insensible to every thing but to the volatile salt, when applied to his nostrils, or to cold water thrown upon the face, both of which were occasionally employed. In the evening, I found his pulse was rather fuller, and 84, his respiration less noisy, and his limbs were more flexible. A stimulant enema, of senna and sulph. magnesiæ was administered, by which one stool was procured, involuntarily discharged. A common enema was administered in three hours afterwards, which procured one scanty stool, also involuntary. The report which the attendants gave next morning, 15th, was, that they had gotten him to swallow some wine and water, and soup occasionally, but that he was apparently insensible to every thing that was going on about him; that he never once attempted to open his eyes, and that he was frequently bedewed with a warm sweat, which was general over the body. As he now swallowed with considerable ease, an infusion of senna was given him at intervals, which not operating in six hours, a bolus of jalap and calomel was ordered. In about three hours after, he had two or three plentiful stools, which were involuntarily discharged. About ten o'clock at night, his breathing became very laboured, in consequence of which I was sent for. I perceived his features were now much shrunk, his mouth was very open, pulse 120, and weaker, respiration hurried, and he lay perfectly extended on his back. There was no coldness of his extremities, which might have been accounted for from their being constantly surrounded with warm irons and flannels. Sinapisms were applied to the inside of his thighs, and cloths, soaked in vinegar and water, to his head. In less than an hour he began to draw up his limbs, and appeared to feel some uneasiness from the sinapisms, which were taken off, and applied at intervals only. During the night he took some bread-berry, and towards the morning of 16th, he understood what was said to him, and, for the first time, raised one of his eyelids; but had no recollection of what had passed from the time he went to bed on 13th. His bladder was very much distended with urine, but he was unable to get any passed, though he had made several unsuccessful attempts, and had rendered several liquid stools. A catheter was introduced into his bladder, and 5½ lib. of urine, of its natural appearance, were drawn off, which gave him great relief. This operation had to be repeated for three or four days afterwards; and as his stools, though frequent, were black, and accompanied with tenes-

mus, he was frequently purged, and immersed in the warm bath at night.

——— M'Hraith, who was in another apartment of the house, was blooded soon after he was brought out of the vessel. I saw him soon after the bleeding, which had been to the extent of 12 or 14 ounces, and his pulse was then scarcely to be felt. He looked wildly around him, raised himself frequently, as if he had some difficulty of breathing in the horizontal posture. He refused every thing that was offered him to swallow, and spoke incoherently. He was immediately put into the warm bath, and was kept immersed for ten minutes, when his pulse became fuller and stronger, and he now swallowed a little wine and water. In an hour or two afterwards, he had a bolus of jalap and calomel, which operated fully in three hours after it had been swallowed, when he found himself very easy, and his skin assumed its natural appearance. I did not see him after this; but I understood he had a slight discharge of blood by stool for a few subsequent days.

The mate lost also a few ounces of blood, which he bore perfectly well. He had a bolus of jalap and calomel, from the operation of which he found much relief. He was able next day to walk about, but felt weak; had slight headachs, a moderate diarrhœa, and a trifling discharge of blood from his nose and lungs occasionally, for the two or three following days.

In the above cases, I think we have examples where the noxious gases arising from combustible matter, have entered the lungs, and have been taken into the course of circulation.

We must suppose this from the length of time during which the people were exposed, and from these gases being in no considerable quantity, only gradually penetrating through the seams of the partitions, which separated the cabin and forecastle from the hold, where the fire had been burning, and the wet sails set to dry.

The most prominent external appearances in them were, the great lividity of the surface, the inflexible condition of the extremities, the fingers and toes curved, the mouth shut, the nostrils dilated, and the great debility of the animal functions. It is impossible to say, from the three cases of the persons who were sleeping in the forecastle, whether the young or the old, the weak or the robust, resist the delcterious effects of these gases longest. For M'Dillon, aged 17, healthy and robust, lay at the back part of the birth, which was inclosed on all sides, except at the fore part, with boards, where Leslie, aged 53, lay. The latter would inhale the gases much diluted, whilst the former must have received them more concentrated. M'Hraith, aged 11, recollected his getting up sometime during the night, to take a drink of water, but was unable to speak, or get up the ladder, or

even back into his bed, and had lain therefore on the floor till the morning, when he was lifted up into his birth. In an hour or two after, he had been taken out of bed by his mother, who washed his hands and face with cold water; and, little suspecting the real cause of her son's illness, had again put him into his bed. The mate, aged 32, lay in a more roomy apartment, the cabin, where the pure air would get access by the funnel for the chimney, and where the gases must even have been less in quantity, from the partition which separated it from the hold being stronger and more complete.

I am extremely sorry that I was denied permission to open the cranium and thorax of the body of M'Dillon, by which the true state of the brain and lungs could have been ascertained.

I have omitted to say, that the above persons were more than once visited by Dr Patterson and Mr Whiteside of this town, with whose approbation I followed the treatment I have just related.

Ayr, Sandgate, 10th Dec. 1810.

MEDICAL EXTRACTS. No. V.

Extracts from Dr Beddoes's *Commonplace Books.*

The Medical Extracts for our present Number are furnished from the commonplace books of Dr Beddoes. It appears that he was in the habit of committing to paper, the facts which presented themselves to his observation, and the ideas which occurred to his mind. But this was often written with the most careless haste upon detached scraps of paper. Many hints and speculations were however fortunately preserved in two commonplace books from which his biographer has industriously selected whatever appeared to him not to have been incorporated in any of the numerous publications of his friend. We have again excerpted those relating to our profession, as the last gift of a truly original mind. "These are submitted to the reader in an unfinished state, and should only be looked upon as memoranda, of which the value must often depend upon the thought, and not upon the style in which they are clothed."

Association. The associated feelings occur sooner than the associated ideas; at least, sometimes; Query if always? To day (November 22d, 1804), I met a person whose aspect instantly gave me the feeling of respect. It was some time before I remembered that he was like Dr Black. In education it is the greatest question what feelings or ideas shall be associated with impressions or ideas; *e. g.*

in case of danger of fire, whether fright shall occupy, *i. e.* a feeling, or the idea of the means of extinguishing the flames, and rescuing those in danger; and so on through numberless instances. In the bodily frame something similar occurs. Sensation too readily follows, sometimes, certain powers, as mercury. In surgery, the mind of the operator ought wholly to be occupied by ideas.

Absorption. Could not its effect upon the form of parts be rendered sensible (in a dog or a cat for instance), by applying pressure to a fleshy part? As form depends upon the proportion of absorption to secretion, how much must it be altered by pressure on the stomach, &c.

Aristippus, *medical.* Who can, at one moment, employ himself in the difficult exercise of combining the nicest observations on animal nature, and the next, listen with obsequious attention to the medical nonsense of fashionable ladies? It is certain that the latter would unfit and indispose most men for the former. But there may be, once in an age, a medical Aristippus, whom such varieties may become and delight, though one does not well understand how he could compensate his servility to himself, except by fleecing his patients, and (laughing at them in his sleeve) making a puppet-show of them in his imagination, as children play at one-and-thirty by thought.

Bath, *warm.* A kind of criterion for constitutions. When it heats and quickens the pulse much, it over-stimulates. This is the case with very nervous people. Miss —— could not bear it when weak; can bear it now. Mrs —— could bear it well one day, but not the next, after a flutter. A criterion for nervousness, and a scale for its degrees. Other debilities are not aggravated by it. The same person cannot bear it after dinner, who can well in a morning.

Blisters. The debilitating effect of, not enough attended to. A blister often weakens more than a moderate bleeding. Whether the weakness continues so long, I am not prepared to say; but I am not sure of the contrary. I have known cases in which a blister of the size of a shilling has induced fainting. Faintness is a very familiar effect. It is not the discharge, but the prior action that is followed by this consequence, as I have repeatedly ascertained, by observing that it took place before the blister had arisen.

Blisters *of boiling water.* Query. Do they excite eruptions like cantharides? as, by suddenly exerting a great effect, they should less excite associate motions.

Cold-blooded animals. Query. If distinguished from hot by a smaller degree of animal fermentation? or the small interior action changing and renovating the parts every moment? Their habits and powers of endurance without food, without blood for a certain time, with infrequent respirations, indicate this. There seems to be a stock of active principles reposited in the solids, and ready to act with great force or quickness on any provocation. But then the effect ought to produce phenomena correspondent to those in hot-blooded animals. Opium ought to raise the temperature of frogs for example.

Mem. To try this—to opiate a number of frogs near an air-thermometer. Also, to digitalize them.

Query. The hotter the animals, the more internal fermentation? Query. If an under-oxygenated atmosphere would not answer at one period, and an over-oxygenated one at another, in fevers?

Why is there a perpetual change of substance in organic animal matter? If a muscle or nerve be required to be the same for a time, why, when once made, should it be made to be unmade again? Is it necessary in the economy that these actions should be, to produce etherial fluids or influences?

If heat should not follow the artificial stimuli in frogs, may not their organization be so disposed as to produce electric fluid instead?

N. B. To try to determine this.

Consumption. *Medicorum phthisicis medentium, iniquissima est conditio.* If the patient be far gone, the result disgraces him. If it be an early stage, neither the patient nor the relations have any idea of the evils that have been prevented, and very likely the complaint passes for a whim of the doctor's.

Contractor. In building, if you alter your plan ever so little, the bargain is no longer binding upon the contractor. The principle still more frequently serves the physician than the architect. On a small deviation from our instructions, we hold ourselves relieved from all responsibility. "Poor Mr Such-an-one! he died to be sure; but he might have been alive and well at this day, had he thought proper to abide more strictly by advice."

Currie. Who has so strongly recommended himself to professional readers by the general excellence of his matter, and to unprofessional, by the charm of his classical style.

Damp. In a large room or a church, said to be sensible after the first lighting of a fire. Query, if the excitation of currents do not produce this effect, as in Hutton's theory of rain? To ascertain this by hygrometers at different heights.

Digestion. If such a quantity of food be taken as the stomach can manage, digestion will be more perfect from repose, and repose more refreshing from digestion. But if it be unequal to the task imposed upon it, then heat is excited, which the weight of the bedclothes increases, and sleep still more. This worse in fever. By this is to be solved the constant difficulty proposed to medical men about supper-eating; which should always be answered in the affirmative, in this sense, that as much food should be in the stomach as can be fully digested before morning.

Diseases, dissimilar, having a symptom in common, as, for instance, a cough. There are two pictures, each with a house in it, but the one with trees, cattle and a river, the other with carriages and human figures. You may as well swear that the one and the other are alike because they have the house in common. My good Madam, by sticking to the cough as evidence of identity, you reason not a whit better than good Master Fluellen, when he found an M. both in Macedon and Monmouth.

Ear. On putting cold water into the meatus auditorius externus, I have felt a general *frisson*. Can this be applied to the stopping of hæmorrhage or fever, as it can be increased by more evaporable li-

quids? Is the shivering from inhaling ether-fumes, occasioned by the ether itself being raised by the heat of the nervous membrane into a rarer vapour?

Experiments *in medicine.* Those who decry them do not perhaps perceive, that they cut off all hope from those at present incurable.

Fatality. It is not the natural fatality only of certain complaints which deprives so many children of their parents, and so many more parents of their children. When all the world sees how often medical men differ, and of course how often one or another must be deceived, is it wonderful that they do not, from this very circumstance, deduce the extreme difficulty of judging, and the extreme danger of meddling? Ask any of these volunteer prescribers to calculate an eclipse, they will feel that they want the necessary *data:* but do they not always just as much want the necessary *data* for calculating the relation of drugs to symptoms?

Fashion. Of which the tyranny bears as hard at least upon health as upon morals and fortune: the rigour of it to be best mitigated by physiological information. I do not know whether the whole flock would follow a leading sheep into a torrent that had whirled her away; but it is probable that the followers of fashion will follow their leader into almost any danger, though not the least advantage were to be gained by those who should get through it.

Fallacy. One of the most common in medicine is to take up the most striking visible phenomena as the cause of symptoms. Thus in measles, is what they teach of the repelling of the eruption right? viz. that cold or ill-timed purgatives, by so acting, endanger life or occasion death? May not the disappearance of the eruption be a collateral effect merely? By a particular treatment the rash disappears, yet the complaint is rendered mild. Cold is injurious long after the eruption, and is so because the mucous membrane is then highly susceptible.

Food. It may be made a question whether the attachment of certain species of animals to certain kinds of aliment, depends upon the absolute necessity of their nature, or upon the ease with which they are able to procure their subsistence. This question many of Spallanzani's experiments have a tendency to determine, as those upon the eagle and pigeon.

Healing. Those who despair of making much proficiency in the art of, very naturally turn their talents to the art of pleasing. They are seldom joined. Men of genius and knowledge are not fond of hearing and delivering of nonsense.

Hunter, John. Fancied what he could not find words for, very profound. But he was mistaken. Whenever he found himself at a loss for words, he was labouring with the delivery of nonsense.

Hunter. When one heard of John Hunter as the first surgeon in London, one felt a pleasure like that which arises from the distribution of poetical justice.

Incubation, *medical.* It may seem very hard that children after coming into life should, now-a-days, require a sort of medical incubation. To such an observation I can only reply, that, reducing a

proposition to terms derived from ludicrous analogies, is not sufficient for its refutation; and after laughing at the joke, Ladies and Gentlemen, it will be as prudent to inquire into the truth of the statement.

Inflammatory Diseases. General and topical bleeding. Query, Would it not be of use to follow it up immediately with strong stimulants? It appears so in external inflammation, as of the eye. Query, in internal inflammation?

Darwin, after depletion, advises small doses of opium to swallow up new-forming vessels: more likely, it prevents the dilatation of old ones.

Interpreter, *clinical*, in which a practically useful enumeration of diseases is attempted, with a preliminary discourse upon nosology.

Medicine. *Difficulties in the way of practising.* One of the most important experienced by the Court and West end of the Town physicians, is to compound with the medical opinions of the ladies. They have not only their notions, as who has not, concerning diseases and their remedies, but may be said to have their minds made up on these difficult and important subjects. The best thing the Doctor can do, (that is, towards securing their good word, which is, self-evidently, the best thing the Doctor can do), is then to put his pen under the guidance of these good ladies' theory, and content himself with translating their suggestions into certain learned abbreviations, *pilul. pulv. haust.*; which are, perhaps, the main support of his professional dignity, as being the sole remaining mystery of medicine into which the profane have not penetrated.

Medicine. Many men who have bestowed deep thought on other subjects, are sceptics in regard to medicine. What the profound distrust, it is in order that the witty should deride. From the combined influence of the opinion of these two classes, it is obvious how much more easily the sick must be surrendered up to gossips, and the medical creatures of gossips. In a country which no one has been able to explore, what matter whether we take the blind or the lynx-eyed for our guide? If the art of medicine be so very uncertain, what matter by whom it is practised?

But the inconsistency of human opinions is at least equal to the inconsistency of human wishes. And it is curious to observe how the workings of the most powerful minds play people into the hands of the most incompetent in the profession. A man accustomed to close reasoning cannot long reflect upon his own health, without forming to himself a system of theory and practice. He fixes upon certain data, and draws a long legitimate train of consequences. His plan being pretty well settled, he has scarce occasion but for a dispenser of drugs. Whether application be made to a dispenser or a prescriber, the road to the confidence of the patient is open. His own statement will give the cue, and a very little cunning only is necessary to follow it. Some of our most learned literati have come to take pleasure only in obsequious followers; and in some circumstances, obsequiousness, either direct or indirect, is more required for opinions, relative to health, than to any other subject.

Medicine. The complete sceptic in medicine, must either maintain that the order of animal movements has no fixed laws, or that

the human understanding is incapable of discovering those laws, or that no useful progress has been actually made in the research.

Medicine. *Art of.* Staggers forward on disjointed ideas, as on so many ill-placed stepping-stones, every now and then dropping its charge into a slough.

Measles. May not the eruption be innocently and advantageously checked by warm affusion? See *Fallacy.*

Mockery of Medicine. If the roof of your house were damaged, and the workmen you employed to repair it were to attend at their hours, and go through all the movements of their labour, and yet not strike one effectual stroke, and yet receive their pay, what would you think of it? So it is oftentimes, in medicine.

Muscle. 1. To irritate repeatedly over lime-water, and try if any carbonic acid is produced.

2. To cut out one and weigh it; then to extract the air by the air-pump; then to weigh a corresponding muscle, irritate it, and extract air by air-pump, and to examine both.

3. To steep both, and to try if any more or different salts are extractable from them.

4. To expose to nitrous gas, respectively, and other chemical processes or re-agents, in order to discover any chemical products.

N. B. Muscles may produce galvanic fluid in their contractions. To try.

Nature. It is a vulgar error to say such an invalid shall be left to Nature. The thing is merely impossible. Nature has no temple in which the sick can be deposited. Medicines made up at an apothecary's may be discarded; but some sustenance must be administered, and some plan of management followed; and the circumstances of these may be far from indifferent. What they call Nature is all art; art-fed, art-dressed victuals, as artificial as medicines.

Nerve. To wrap a piece of nerve in tinfoil, and galvanize till exhausted; then place said nerve in oxygen, to try if it will recruit.

Nosology. Cullen laid diseases upon the Procrustes bed of his Nosology; and tugged at this, and hacked at that, but all in vain. They could not be made to fit, as all who compare his frame with Nature must acknowledge.

Nurses, *anatomical lectures for.* Were any one to propose such a thing, he would expose himself to all the banter of our critical journals. I have never known an habitual banterer remarkably embarrassed by tenderness of feeling; nor do I soon expect to see such a phenomenon. Nevertheless, were one to have a child die of water of the brain, from the carelessness of a nurse, and were it to be discovered that all this might have been prevented, if the accident had been sooner known, I am not sure whether he would not restrain his wit for some weeks at least after the event, whatever sport he might be able to make before the public of the poor author.

Perspiration. To immerse a child's hand in a weak solution of nitrate of silver, ditto an old man's, ditto a dog's, to observe the difference of the precipitate. Immerse the hand or finger in nitrate of silver diluted with distilled water before and after breakfast, or before

and after sudorifics; also, to discover what part of the body perspires most.

PHYSICIANS, *use of.* "Who had Mr —— to attend his daughter?" "Doctor Such-an-one." Public censure is satisfied. Thus, as an unmarried female cannot go into public but in company with a married one, so it is with death. He cannot make a decent entry into a family without a doctor for his chaperon.

PHYSICIANS, *posting.* Like some of Astley's jockies, who from a horse on full gallop pick up things in their way, some physicians post from sick-chamber to sick-chamber, just stopping to pick up their fee. The physician in many cases, as in croup, should no more leave his patient, than an accoucheur a woman in labour, till she is delivered.

PHYSICIANS, *puzzling multiplicity of phenomena.* A traveller may course the high roads of a country for twenty years, and yet know nothing of it. Our fashionable Doctors drive full gallop along the beaten paths of medicine; but very wisely, lest they should become dizzy, by the rapidly-succeeding objects on either hand, they either keep their eyes fixed on the road before them, or shut them close.

PHYSICIANS, *fashionable.* In many places of fashionable resort, the practice of medicine seems but a pompous or specious kind of mummery. It seems as if sickness were an affair of complaisance towards physicians and apothecaries. Thus the language is not, so many invalids have been cured, but such a Doctor makes so much money.

Such men may make, no doubt, a conspicuous figure in the books of their banker, but not a line will be devoted to them in the annals of medical improvement. If they were not aware of the *desiderata* of medicine, I know of no terms strong enough to express the detestation in which they ought to be held. If they were, it is certain that they took no step towards supplying them; and on this supposition, I leave them to the mercy of the reader's abhorrence.

PHOSPHORUS. To eat a little; bleed; smell and try the air in the dark, if luminous.

PHYSIOLOGY. What would chemistry have been in comparison of what it now is, if apothecaries only had cultivated it? So will physioloy be, unless it be taken up separately.

PREMATURE CULTURE favours every species of constitutional disease, engenders scrofulous and nervous complaints where they are not hereditary, and produces new forms of human misery. In this respect, the children of the poor enjoy a much greater chance of health. In the evidence respecting the slave-trade, there is nothing more abominable than the servitude to accomplishments. As to labour and the lash—is the case less miserable when it is the mind that suffers?

QUACKERY. The extension of it remains to be proved. There may be an increase of advertised medicines; but when I consider the immense number of herbs mentioned in our hold herbals, and recollect how busy were our old women, I see that they very much exceed the quack medicines; and I venture to believe that medicine, in proportion to the population of the country, is less frequently administered by unprofessional hands than at any former period.

Rabies Canina. To try hot-bath 104° and affusion of cold water, and that six times a day; boiling water on the neck; also removing a part of the cranium, and keeping the brain compressed.

Reform, *medical.* The quantities of medicine ordered drive people to quack medicines. People can drop the latter when they please, but *verecundia erga medicum* makes them keep on longer with the former, than either the stomach or the purse can well endure. To rescue the public from the stomach part of this evil, it will be proper to enact that the apothecary shall charge for more draughts than he supplies, as used to be the case with post-horses in France.

Rheumatism. There is a degree of rheumatism, semi-acute, no redness of joints, but some fever and much pain (increased by warmth) in which there is prodigious dyspnœa, though the intercostal muscles be not painful. Here seems to be some weakness of the muscles of respiration, which, I think, the heart partakes of; and under these circumstances, I suspect the heart readily enlarges; having known instances of such rheumatics labouring under enlargement of the heart.

Rooms, *temperated.* Better than any climate in winter. The question is, whether you choose a commodious prison with health, or to be at large and diseased. It is not to be expected that you should enjoy the advantages of health under disease.

Sensations. Of great importance to avoid disagreeable ones in fevers—vivid colours, or associatively offensive objects. Accurately observing attendants have assured me, that nauseous medicines in fever did much injury, especially to children.

Sleep. A subject requiring much study, or rather, much accumulation of facts. There is the utmost poverty of facts in all that has been written on it; probably gross errors; as appearances in the sleep of the sick, may be supposed to arise from disease, and yet have existed in health when the sleep was not watched. Observation can be made much better by unprofessional people. In sleep the passing ideas are lost, so the connected muscular movements must be lost too. As in sleeping over a book, and it drops down, or before it drops; and as it is dropping, the purpose is recalled, and I save it. In sleep, if the ideas return, the connected movements return too: so people might be practised to do any thing in sleep; may be made to talk or walk.

In inflammatory disorders, if due evacuations be not premised, aggravation. Query, from congestion? if they be premised, amendment; and both amendment and aggravation take place more rapidly than in waking state.

Sympathy. A term that ought to be soon expunged from the language of philosophical medicine, having been a term of ignorance. Sympathetic movements tend to become independent, as in hepatic epilepsy. The fits will continue after the liver is cured.

Walks. Too long, in summer, injurious to children. They should be suffered to recruit frequently. Soon exhausted, and soon recruited. In many cases, children of two years old, or so, have fallen off

directly upon an uninterrupted walk of a mile and a half. The same will happen to adults of great delicacy.

WASHING. Among the hardships incident to poor married women with a family, one is particularly severe. This is frequent dabbling in water to wash. Nothing can support the constitution of many against the trial. I have kept an account of the health of several for months; I could do them service in the short interval: but so sure as came the wash, so sure came all the complaints back again. In consequence of this employment, and this only, a slight cold shall undermine the constitution, keep them sickly for years, and at last destroy them. Can no good genius invent a machine, by which opulent neighbours, attentive to their hard-fated fellow creatures, may be able to relieve some of them from this destructive drudgery.

WHIRLING *a firebrand.* To use this as a test for the eye in persons nervous and not nervous, *i. e.* to see if to some, at a certain velocity, it will not appear a circle, and to others not.

For the following *complete List of Dr Beddoes's Publications,* we also acknowledge our obligations to Dr Stock.

1784 Translation of Spallanzani's Dissertations on Natural History *A second Edition in* 1790.
1784 Notes to a translation of Bergman's Physical and Chemical Essays.
1785 Translation of Bergman's Essay on Elective Attractions.
1786 Translation of Scheele's Chemical Essays. *Edited and corrected by Dr Beddoes.*
1790 Chemical Experiments and Opinions, extracted from a Work published in the last century.
1791 Observations on the Affinity between Basaltes and Granite.
1791 An account of some appearances attending the conversion of cast into malleable iron.
1792 Second Part of ditto.
Uncertain. Memorial addressed to the Curators of the Bodleian Library.
1792 A Letter to a Lady on the subject of early Instruction, particularly that of the Poor. *Printed, but not published.*
1792 Alexander's Expedition to the Indian Ocean. *Printed, but not published.*
1792 Observations on the Nature of Demonstrative Evidence, with Reflections on Language.
1792 Observations on the Nature and Cure of Calculus, Sea-Scurvy, Catarrh, and Fever.
1793 History of Isaac Jenkins.
1793 A Letter to Dr Darwin, on a new mode of treating Pulmonary Consumption.
1794 Letters from Dr Withering, Dr Ewart, Dr Thornton, &c.
1794 A Guide for Self-preservation and Parental Affection.
1794 A Proposal for the Improvement of Medicine.

1794 Considerations on the Medicinal Use, and on the Production of Factitious Airs. Parts I. and II.
1795 Brown's Elements of Medicine, with a Preface and Notes.
1795 Translation, from the Spanish, of Gimbernat's new Method of operating in Femoral Hernia.
1795 Considerations, &c. Part III.
1795 Outline of a Plan, for determining the Medicinal Powers of Factitious Airs.
1795 A Word in Defence of the Bill of Rights against Gagging-bills.
—— Where would be the harm of a Speedy Peace?
1796 An Essay on the Public Merits of Mr Pitt.
1796 A Letter to Mr Pitt on the Scarcity.
1796 Considerations, &c. Parts IV. and V.
1797 Alternatives compared; or, what shall the Rich do to be Safe?
1797 Suggestions towards setting on foot the projected Establishment for Pneumatic Medicine.
1797 Reports relating to Nitrous Acid.
1797 A Lecture introductory to a popular Course of Anatomy.
1798 A suggestion towards an essential improvement in the Bristol Infirmary.
1799 Contributions to Medical and Physical Knowledge, from the West of England.
1799 Popular Essay on Consumption.
1799 Notice of some Observations made at the Pneumatic Institution.
1799 A second Collection of Reports on Nitrous Acid.
1800 A Third ditto.
1801 Essay on the Medical and Domestic Management of the Consumptive, on Digitalis, and on Scrofula.
1801–2 Hygeia; or Essays, Moral and Medical, on the Causes affecting the personal state of the middling and affluent classes.
1803 Rules of the Institution for the sick and drooping poor. An edition on large paper was entitled Instruction for People of all Capacities respecting their own Health, and of their Children.
1806 The Manual of Health, or the Invalid conducted safely through the Seasons.
1807 On Fever, as connected with Inflammation, an Exercise.
1808 A Letter to Sir Joseph Banks on the prevailing Discontents, Abuses, and Imperfections in Medicine.
1808 Good Advice for the Husbandman in Harvest, and for all those who labour hard in hot births; as also for others who will take it in warm weather.

In this list, are not included a variety of communications to the Medical Facts and Observations, the Monthly Magazine, the Medical and Physical Journal, Nicholson's Journal, &c. The paper on basaltes, and the two on the conversion of cast into malleable iron, were published in the Philosophical Transactions for 1791 and 1792.

PART II.

CRITICAL ANALYSIS.

I.

Facts and Opinions concerning Diabetes. By JOHN LATHAM, M. D. F. R. S. Fellow of the College of Physicians, and Physician-Extraordinary to his Royal Highness the Prince of Wales. 8vo. pp. 244. Murray.

IT rarely happens, that we are called upon to exercise our critical functions towards an author, who comes forward with so many extrinsic and adventitious claims upon our attention, as Dr Latham possesses. A zeal in favour of the science of medicine, often bears an inverse ratio to the quantum of occupation in the art; the leisure and opportunity of research necessarily diminish as employment is increased; and one great motive to publication, the desire of gaining public fame, is also, from the same cause, in a great measure done away. Hence few authors come before us, who, in addition to dignities, such as are enumerated in the title-page of this work, can boast of having been engaged for a considerable period in the superintendence of a large hospital in the metropolis; and of having spent a life, which "is verging towards the vale of years;" in a practice so extensive, that they "have long since been raised into a state of affluence and independence." (Dedication, p. vi.)

Had not observation long ago taught us, that the experience obtained is by no means proportionate to the time and opportunities, which have been enjoyed in the pursuit of it, we should hail the appearance of every veteran practitioner before our tribunal, as the benefactor of the medical art. But "barba non facit philosophum:" age has its vanities as well as youth; and the vanity of worldly advancement is not more dignified or rational, than the vanity of early mental accomplishments. Whencesoever it may come, therefore, the internal evidence of any work is the only legitimate ground for the decisions of criticism.

In his dedication to Dr Reynolds, the author explains the circumstances, which, in the midst of his successful career, afforded him the opportunity of writing his book; and both here, and in other parts, communicates several little points, which will be useful to his future biographer. Upwards of two years ago, he was "overtaken by disease," and was attended by Dr Reynolds and the late Dr Pitcairn, and, during his slow convalescence, by their "joint advice," he desisted for a time from practice.

"The resolution, under such advice, could not be well delayed, and I retired to my own estate in Cheshire, the fair fruit of my professional industry, &c.;—but, instead of resuming the busy situation in which my health had so severely suffered, and being unwilling to hazard the convalescence in which I was happily enabled to return to London, by exposing myself at once to the labours of a very active life again, I in a manner seceded into the west end of the town, for the purpose of pursuing my business within a much more contracted circle." p. viii.

During this comparative leisure, Dr Latham collected his "scattered scraps upon diabetes, a disease to which he had for many years very particularly directed his attention;" and, with the translations and speculations hereafter to be noticed, he composed this volume. Although destitute of any division into chapters or sections, and sent forth without either index or table of contents, it nevertheless possesses a sort of arrangement under three heads. The first of these contains a history of the opinions of some preceding writers on the subject of diabetes; the second comprehends the "opinions" or hypothesis of the author, relative to the nature or proximate cause of the disease; and the third includes the "facts," or cases of diabetes, which have occurred under Dr Latham's observation.

Before we enter upon any analysis of the work, we may mention, that the author repeatedly tells us, that he has been weaving hypotheses to explain the phenomena of diabetes for many years (p. 96); that he has again and again "abandoned his own opinions as futile and insufficient," (p. 109); that he has "been moving as it were in a circle for many years, and has vacillated from point to point," &c. (p. 126); so that we do not wonder that, after all this fruitless expenditure of thought, he is now rather fearful that his "opinions may be treated as trifling," and may subject him to critical chastisement; against which we give the following salvo as a specimen of his *adult* taste.

"But to deprecate this, you will see," he observes to Dr Reynolds, "that I have hit upon the expedient of *artfully* introducing, almost at the commencement of the book, a few bold associates, who, as strenuous and steady champions, will stand tolerably well against the first brunt of the battle; and if they do not avert, they will at least

The following sentence may be literal; it is certainly absurd, and faulty in construction. "Hence, it seems to me, that Diabetes has acquired its name, *being a kind of siphon, by reason of which* THE WATER *cannot remain in the body, but* MAKES USE OF MAN *as a passage for its egress.*" Query, is the disease a siphon? or the patient? and from whence does *the water* effect its egress, when it "makes use of man *as a passage?*" It is true that the word διαβήτης is used *metaphorically* for a tube or Siphon; but Dr Latham, by the words, "being a kind of siphon," is translating οἱονεῖ τι διαβητικόν, "perinde ac si *pertranseuntem* dixeris," as it is commonly rendered; and by "the water," τὸ ὑγρὸν, the "humour" or moisture of the body. Literally, we apprehend, the sentence runs thus. "Hence the appellation of diabetes seems to me to have been given, as if it were something passing through, because no humour will remain in the body, but permeates the man to its egress."

We pass some other obscurities, to notice what we conceive to be a gross misrepresentation of Trallian, arising, not only from misconception of the language, but from ignorance or inattention to the doctrines of the Galenical school, which Trallian espoused. Dr Latham's version is as follows. Having mentioned the symptoms and appellations of the disease, the writer says,

"It arises as well from the weakness of the retentive power in the kidneys, as from the strength of the attractive power, which, on account of the heat of the system, necessarily draws beyond measure, not only the moisture that is in the veins, but that also of the whole body; wherefore *to this heat then we find that dyscrasy must be the direct consequence;* and the whole method of cure will therefore consist in *animating* and invigorating the system." p. 33.

Now, according to any system of principles, this inference, from the premises here stated, is unintelligible. But, according to the Galenical doctrine of *temperament* and *intemperies* (κρᾶσις and δυσκρασία), which constitute the modifications of health and disease, and consist in the due proportion of the four humours, and their qualities of hot, cold, dry, and moist, and in the excess or defect of some one of these, respectively,—the inference of Trallian, when correctly translated, is clear and rational. He says "there are two circumstances in the condition of the kidneys which give rise to diabetes; namely, the *weakness* of the retentive power, and the *strength* of their attractive power, which last originates from excess of *heat:* wherefore" he infers, (we here translate literally) "*it is necessary to oppose this intemperies* (the heat); and thus the whole method of cure will consist in *refrigerating* and *strengthening* the system." That is, we must reduce the *heat*

which augments the attractive power, and *invigorate* the *weakness* of the retentive power. * This may excite some doubt, notwithstanding the assertion that our author "has long been in the habit of tracing the disease in the earliest writers," whether he is really familiar with ancient medical opinions: a doubt which is somewhat increased by his expression of surprise which the recent perusal of Galen has called forth, and the confession which follows. "And indeed throughout the whole treatise," Dr L. exclaims, "it is *wonderful to observe* the accuracy with which Galen handles this subject of urines: and on reading it, I could not but reproach myself for the neglect with which, in common, I fear, with many other physicians, I have treated it." p. 13.

Dr Latham however thinks, (and we perfectly coincide with him in the opinion), that it would be "waste of labour to copy further from the more ancient Fathers of medicine;" and therefore he descends at once to Willis. He copies the *whole* of this writer's "invaluable treatise," which he prefaces by an eulogium on his character, and a brief sketch of his life, "in the hope that when the name of Willis is hereafter mentioned, he may sometimes also be consulted." This seems to imply that Dr Latham has now consulted him for the first time; but the insinuation is altogether unjust, in regard to physicians of any pretension to medical research and erudition. We apprehend, however, that the very "abundant store of *theoretical* information" which calls forth a part of Dr Latham's admiration, is the principal cause of the neglect with which the writings of Willis have often been treated. He was, doubtless, the first author who noticed the saccharine quality of the urine in diabetes; † but his absurd chemical humoral hypothesis, of the "dyscrasy of the nervous juice," the sourness of the excrementitious humours dissolving the "liquor of the blood into too great a serosity,"

* The following are the words of Trallian. Having just mentioned the heat, θερμασία, he says, διὰ ἣν πρὸς ταύτην ἵστασθαι δεῖ τὴν δυσκρασίαν. ἢ ὥστε ποιεῖσθαι τὴν πᾶσαν θεραπείαν, ψύχοντας μὲν τὸ σῶμα ἢ χαυνοῦντας. Edit. Steph. 1548, p. 151. In translating this passage, Dr Latham has adopted the less common acceptation of the word δυσκρασία, when it is rendered by *dyscrasy*, (signifying an undue mixture in a compound fluid); and he has used the verb ψύχω in the sense of *animate*, in which it is never employed, we believe, even metaphorically.

† It may be observed, however, that the urine had been tasted long before the time of Willis: for Trincavella describes a case in which a julepum rosaceum was administered; and he affirms that the urine had the same colour and smell as the julep, and that some of the attendants who chose to taste it, said that there was no change in the flavour. (De Rat. Curand. lib. x. cap. 11.) And Hercules Saxonia mentions one species of diabetes, which he thus defines: "Legitima diabetes, est

&c. p. 51, are about as "invaluable" as the attractions of the kidnies, &c. in Galen and Trallian.

We cannot compliment Dr Latham on his translation even of Willis; since it is replete with inelegance, and often incorrect in the structure and idiom of the language. He tells us, for instance, that, in order "that the blood may be *kept from* coagulating, other humours, both from without and within, are *seized into it*," p. 43. In the following passage, surely there is not only gross inelegance, but a misconception of the author's meaning.

"If there ever was any disease like *to* Diabetes, it was one which TURNED INWARDS, that is, it was one *where* the blood, *melted* into serosity, poured *out* its *meltings into* the whole of the body; for such was, without doubt, that fever which was formerly epidemic in England, called the Sweating Sickness; *where* (in England?) the blood *melting* into a *sort of water*, poured forth into the pores of the body, even at the expense of the vital nutriment itself, every sort of humour both useful and *otherwise*, to be thence discharged by sweat." p. 56.

Now, we conceive that Willis did not intend to say that the sweating sickness *turned inwards*, but that it was a diabetes *inverted*, as it were, or occurring in a *contrary way*;—the *liquamina* of the solids, and the serosity, passing in the one case by the kidnies and ureters, and in the other by the pores of the skin. "Si morbus Diabeti *similis sed inversus* (scilicet in quo sanguis in serositates exsolutus liquamina sua in totum corpus profuderit) uspiam ullus occurrit, procul dubio erat febris olim epidemica, Sudor Anglicus dicta, &c." (Willis, Pharmaceut. Rational. Sect. IV. Cap. 3.)

In stating the case of a nobleman, who had had previous attacks of diabetes, from which he had recovered, but was at length seized with fainting, vertigo, cramps, and other nervous symptoms, Dr Latham makes Willis subjoin the following observation.

"Then, when by the use of proper medicines, these symptoms,

excretio rei potulentæ prorsus, non mutatæ in odore, colore, et *sapore*, per vias lotii:" but, like his friend Trincavella, he attributed the sweet smell, colour, and taste of the urine, to the sweetened ptisan which the patient had drunk. And it seems probable, as Dr Girdlestone remarks, that the saccharine beverage and diet of the Eastern countries, and the constant employment of sweetened ptisans by the French and Italian physicians, may thus have prevented practitioners from observing the change which the urine undergoes independently of the nature of the drink: not to mention the disgust which most persons feel at the idea of tasting any thing excrementitious.

which have been just mentioned, had given way—*that is*, when the fluid matter had overflowed from the fibres and solid parts into the blood, and thence into the kidneys and urinary passages, the diabetes, *in its usual manner*, broke out again."

Now the words "that is" apply in fact to the "usual manner" in which diabetes occurs, and have nothing to do with the removal of the previous nervous symptoms, as the author's words will evince. "Deinde," he says, "cum remediorum idoneorum usu, prædicta symptomata sanari videbantur, Diabetes more solito (*scil.* materia è fibris et partibus solidis in sanguinem, et inde ad renes et vias urinarias exundante) recrudescebat." The deliquescence of the solids was not the test of the cure of the preceding symptoms, as Dr Latham represents it, but is Willis's theoretical expression of the recurrence of diabetes.

But we, doubtless, fatigue our readers with our strictures upon such an exercise, in the school-boy phrase, (and who can avoid thinking of the school-boy when he reads these translations?); we, therefore, willingly pass on to the 'opinions' of Dr Latham, observing, by the way, that he terminates his history of the subject, with some quotations from Drs Cullen, Heberden, and Rollo, and a paper of Dr Baillie's, and with a mere allusion to the observations of Drs Girdlestone and Bardsley relative to the disease. We cannot, however, omit to express our admiration of the curious logic, by which our author concludes, that Sydenham took up the opinions of Willis, from the circumstance of his having *said nothing upon the subject*. In his cursory observations on diabetes, Sydenham makes no mention of the sweetness of the urine; but that proves nothing against his knowledge of it, says Dr Latham; he might think it useless to detail what Willis had so recently described.

"Indeed he could not have omitted such a characteristic feature of diabetes as the sweetness of the urine, which must then have been known to every practitioner, had he considered it at all proper to go more at large into the facts, which Willis just before had so fully demonstrated: and *what higher compliment* could possibly be paid to Dr Willis, than that his opinions *should thus be substantially adopted by Sydenham?*" p. 75.

We cannot suppress our surprise, that no mention whatever is made of Dr Home in this history of opinions relative to diabetes; for he was the first to suggest strongly the probability of the beneficial effects of animal food, (Dr Rollo acknowledges the fact); and a dozen of pages in his book contain more sound reasoning, more rational practical views, and a more accurate knowledge of the disease, than are to be found in all the an-

cient writers put together.* But probably, had Dr Latham been acquainted with his treatise, he would not have quoted it; since Dr Home sets out by observing, that "the opinion of Galen, of Aretæus, and of Willis, scarcely merits our serious consideration."

Let us examine, then, the "opinions" of Dr Latham; who, as we have already intimated, has been for a great number of years contriving hypotheses, "vacillating" from one speculation to another, and "abandoning" them all in succession, "as futile" and vain, p. 109, &c. But, "nil desperandum;" he still pursued the flying phantom, and at length succeeded to the satisfaction of his heart; and he now presents the public and the profession with "the theory, which, *after much consideration, and the speculations of many years*, he has *at last been led to adopt*," p. 108. It is impossible to condense it, or to give the substance of it in any words but those of the author, or to illustrate it by any analogical considerations; for

"None but himself can be his parallel."

We must, therefore, transcribe at length the *two* sentences in which it is developed, although they occupy upwards of *four* pages in the author's volume.

"I suppose it may be laid down as an incontrovertible truth, that every thing containing sugar is capable of the vinous fermentation, or of *some process analogous* to it, in which the oxygenous principle must *necessarily* be more or less *concerned*. I will therefore *assume*, that all matters capable of such fermentation, in as much as they contain saccharine particles, and being, from *some circumstances unknown perhaps* to us, very imperfectly digested, and thence affording an incomplete and insufficient chyle, are not fully assimilated when they enter into the general circulation with the mass of blood, but have *their sugar* so weakly and *loosely oxygenated* as to be again readily evolved by the secretory action of the kidneys; not from any fault in the kidneys themselves, but from the regular and natural exercise of their function in separating from the *imperfect blood* such matters as are not *properly* combined with it, and which, from such loose and *unassimilated combination*, may be considered as *unsalutary* to the animal machine. This *loose* and imperfect *assimilation, derived* from vegetable aliment, will render the evolution of sugar more or less easy; and *if we can suppose* the *operation of the oxygenous principle* within the body (and I see no violence in the supposition), *then* we shall *at once admit*, that alimentary matter, however supplied (but that which is

* See his "Clinical Experiments, Histories, and Dissections," pp 313—325. Edinburgh, 1780.

more eſpecially drawn from a vegetable origin), *may very readily be decompoſed by its ſubtraction;* for we know that all vegetable acids out of the body loſing this principle (and they do loſe it in ſeveral methods of decompoſition), become eaſily convertible into ſubſtances very much differing from thoſe in their compound ſtate; *ſo*, by the ſubtraction of it, *either* during the aſſimilatory proceſs, *or in any future glandular operation*, (the combination with its baſis, *double*, *triple*, *or quadruple*, being *originally weak*), chyle, whether derived from vegetable aliment or *otherwiſe*, becomes reducible to its *primitive* ſtate in which it exiſted previous to its union with the oxygenous principle. And as this union in the formation of all vegetable oxyds is in general very weak, ſo is it conſequently the more eaſily broken: for an *original defect* in the operation of the *digeſtive powers*, an *irregular chylification*, a *fault* in the *aſſimilatory proceſs*, either as the lungs may not ſeparate *ſomething injurious* from the *new made chyle*, or impart *ſomething ſalutary* to it; any or all of theſe cauſes combined, *may be* the means of forming *ſuch* imperfect blood, and of rendering it ſo eaſy to be reduced into its *original conſtituent parts* [is ſugar one of theſe?], that when it arrives at the kidneys (to ſay nothing of any changes *it may experience* before it *gets there*), its unhealthy and imperfect craſis is more immediately deſtroyed by its becoming *perhaps* a *direct ſtimulus* to thoſe glands which in an eſpecial manner, more than any other ſecretory organ in the body, unleſs we except the lungs, are diſpoſed to ſeparate *every thing that is not perfect or ſalubrious* from the ſyſtem; and it *can eaſily be conceived*, that there *may be* this imperfect craſis of the blood, *this lax cohesion* of its conſtituent parts, in very different degrees, as is obſervable in dropſy, ſea-ſcurvy, chloroſis, and ſeveral other diſeaſes; ſo that not only may it exiſt where little of vegetable nutriment has been taken, and conſequently where but little ſugar can be produced, but where *animal matter alone* has been eaten; and that the blood, under *either of theſe* circumſtances, may therefore be ſo *deficient in its conſtitution* as to be too readily decompoſed, or have been *elaborated in ſuch a manner* as at laſt to have become ſo effete as to *contain nothing in it* from which the ſyſtem can be *nourished or ſupported at all.*" p. 97—101.

And thus this luminous hypotheſis, which commenced upon the principle, that the dyſcraſy of diabetic blood originated from vegetable oxyd or ſaccharine matter, ends in the admiſſion, that it may exiſt where no vegetable matter is eaten! admirable conſiſtency! In truth, the whole theory is ſo logical, ſo philoſophical, ſo juſtly conſtructed on the baſis of ſound obſervation; ſo far removed from every thing that is gratuitous or aſſumed, that it bids defiance to all comment. We can only, therefore, requeſt our readers to unite with us in admiration of this ſubtle exertion of intellect, the happy reſult of the labour of "more than twenty-five years!" p. 95.

Perfect, however, and incapable of farther addition, as this theory might seem to be, something still remains to render it complete: For, although we have seen how the blood is in an *unknown* state of dyscrasy, and *therefore*, easily separated into the sugar and other substances which are its constituent parts; although the kidneys are obviously proved to be "the *great conservators of the animal machine*," since they "remove from it such substances as, no longer remaining in a state of healthy union, would be destructive to the system," (p. 104), until the system is destroyed, by the removal of every thing from the blood by which it "can be nourished and supported at all;" and although the oxygenous principle is probably "the bond of union, the *vinculum cohæsionis*," which prevents such decomposition, yet is the theory incomplete.

"Yet I think," says Dr Latham, "there is another principle which I cannot forbear mentioning, with which the oxygenous may *very possibly* combine, to strengthen that union, and thereby more firmly to connect or *bind together* the *texture* of the circulating *fluids*: and here I feel that I am treading upon very delicate ground, and consequently advance with diffidence; but I look to the liberality of my readers, and hope for their candid judgment."

Now to the supplementary theory, gentle reader;

"Huc ades, hæc animo concipe dicta tuo."

"Whoever considers that Phosphoric Acid forms, with *particular substances*, a very great portion of all the saline matters commonly found in urine, must be very forcibly struck with the important fact of the absence, or at least the paucity of such salts in Diabetic urine. Experiments must, *from time to time*, be successively made, to ascertain the proportion of phosphoric acid wanting in the animal fluids, and particularly in the blood of those who labour under a Diabetic disease; but considering that such (animal) substances only, as in a more especial manner are known to yield phosphorus, have hitherto proved efficacious in checking the progress of the disease, which I shall abundantly show as I go along with these pages; and considering, too, that the destruction of parts, especially the *alveolar processes*, with the *fangs of the teeth* contained therein (as is very common in Diabetes), *may proceed from the absorbents*, TAKING WHEREVER THEY CAN FIND IT THAT PRINCIPLE, (Phosphoric Acid)"—[most intelligent vessels!] "which *may be more particularly wanted* to give immediate *tone and firmness* to the circulating *fluids*; I cannot help thinking that some stress may be laid upon this opinion, and some hypothesis favourable to the *present improved treatment* of Diabetes founded thereon. I AM NOT VERY FOND OF THEORETICAL REFINEMENTS IN MEDICINE, and consequently cannot draw from such any satisfactory analogical inference; yet I think it will not be denied me, that the

Phosphoric Acid *may possibly possess some influence* in the *production* of this, as well as of some other diseases; for being *in excess, we know* that it will even dissolve the phosphate of lime; and thence *probably may it* occasion that softness and flexibility of bone which commonly obtains in *rachitis:* and if I am allowed to employ the *argument* (!!) respecting Phosphoric Acid, from the *probable excess* of it in rachitis, *certainly may I assume something* from the defect or want of the phosphoric principle, which is *so very evident* in Diabetes; for if the agency of it in any one disease can be allowed, the *absence of such agency* may *well be entertained as a probable cause* in another. I know not how to press the argument in a *more substantive shape* further, as the truth or falsity of it must depend *so much* upon *future experiment.* But I consider it as entitled to some consideration, *assuming* it," &c. &c.

"Such then is the substance of the Theory of Diabetes, which, *after much consideration, and* THE SPECULATIONS OF MANY YEARS, *I have* AT LAST *been led to adopt!*" p. 104—108.

We should be glad to be informed, what notion Dr Latham entertains of the nature and objects of a theory. Does he consider it as a mere frolic of fancy, not to be deduced from experiment already made, but to be tried by *future* experiment,—not to be founded upon what *is known*, but upon what "may be conceived," and "supposed," and "assumed,"—upon what is only "probable," or even "possible,"—nay, upon what is avowedly "unknown to us?" Does he believe that, having borrowed a few terms and phrases from the vocabulary of the mechanist and the chemist, he has transferred their experimental knowledge to the science of animal life? Does he believe, that if he had been straining his intellect for twice "twenty-five years," in raking together a few loose analogies, from the mixture of oil and honey, and mucilage (p. 102), from the decomposition of vegetable acids, or any such processes, that he could thus ascertain the nature of the operations of the living body, and the essential changes that constitute disease? Let him look to the speculations of physicians for two thousand years back; let him contemplate the ascendancy and the utter downfal of the hypothesis of the "wonderful" Galen, and his thousands of followers, if his own understanding do not point out the futility of such an abuse of language and common sense. It is to such absurd substitution of hypothesis for experience, that the slow progress of true medical science is to be attributed; as well as the derision which both the art and its professors have constantly, and in some measure justly, endured: for ignorance, conjecture, uncertainty in prognosis, and mistake as to events, are the necessary consequences of building on hypothesis, instead of patiently investigating the phenomena of nature. "Homines impetu quodam animi," to use the

words of Baglivi, " ac velut pro arbitrio de eadem disserere, non miror postmodum si et falsas inde deducant conclusiones, et curationes morborum talibus innixæ conclusionibus, ex voto non respondeant; miror tamen quod tam leviter causas errorum, exinde provenientium, artis inconstantiæ, ut aiunt, atque incertitudini, non vero *præposteris suis argumentandi speculandique modis* attribuant. Quibus certe de causis factum est hodie, ut multi incertam pronuncient Medicinam, alii prognosticandi doctrinam derideant, &c.;—multi nil credant Antiquis, et Recentioribus nimium, multi neutris omnino."—De Impedimentis quæ Medicor. &c. retardarunt. Cap. iii. § 3.

Dr Latham, however, has not yet done with the recital of his speculations; for he goes on, through twenty pages more, partly enlarging upon the foregoing theory, and partly detailing other " opinions," which he will not call " *idle* lucubrations, since they have been a source of active contemplation for his mind during a very long period,"—in order " that the *doctrine of Diabetes*, now embraced by him, may not seem to have been espoused, *without evincing a good deal of previous investigation*," p. 115. But we have dwelt already much too long upon this notable theory, " which he has now at last presumed to disclose," (ibid.) and shall not consume more of our time in relating his analogical speculations relative to the excessive " excrementitious secretions" in diarrhœa, cholera, and ptyalism. And as to the farther proofs which he is anxious to adduce, of the long and unremitting exertion of intellect which the invention of this inimitable hypothesis has cost him, they might have been omitted, without any disparagement to his sagacity; or the hypothesis itself should not have been promulgated.

—— " vis, Mamerce, poeta videri
Quicquid vis, esto, dummodo nil recites." Mart.

Had Dr Latham been as anxious to observe with accuracy the phenomena and progress of the disease, as to exercise his imagination in building hypotheses, the abundant opportunities which he has possessed, might surely have enabled him to collect something valuable in a practical point of view. For it appears, that at least *forty-one* cases of diabetes have occurred under his eye, during the periods of his pupillage and subsequent practice. But of these, only two or three are detailed at any length, and the remainder are described in the compass of a few lines, or barely mentioned: of some scarcely any notes seem to have been taken; and all the documents relative to others, consist of a few pencil marks on the backs of letters, (p. 143, 162.) Nor are the details, in the few instances where such are given, always

confined to the circumstances of importance in the disease. The cases are stated in *chronological* order, respecting the accuracy of which the Doctor sometimes expresses his doubts; and they include an account of many circumstances of his professional career, such as his attendance on the Radcliffe Infirmary, his election as physician to the Infirmary at Manchester, afterwards to St Bartholomew's Hospital in London, &c. &c. Nevertheless, the author twice apologizes for the irksomeness of such long details, although he discovers, at the conclusion of them, that "to have described that which has had actual existence, is much better than to have speculated upon probabilities" (p. 200): a discovery which, it were to be wished, that he had made, not only before he composed the former portion of this volume, but before he began to collect the histories of disease.

It appears, though not always clearly, that, of the *forty-one* cases described or mentioned by Dr Latham, *nineteen* died; *nine* were not cured, but some of them relieved; *six* were not seen frequently, and their termination was unknown; and *seven* are stated to have terminated favourably. Two of the last, however, occurred within the present year, and therefore the permanency of the cure is somewhat doubtful; and in one (the first case related by Dr Latham), although great amendment was observed, the absolute cure was not ascertained. In this case the amendment was spontaneous, or at least independent of medicine, and was attributed by the patient to profuse perspirations, occasioned by exercise in the labours of the field, which he gradually brought himself to bear. "Had we been then," Dr Latham remarks, "as convinced of the efficacy of *animal food* in diabetes as we now are, we should probably have thought that the provincial diet of that district might possibly have contributed to his relief, for the poorer sort of labourers usually lived upon a *large onion*, (what species of animal is this?) with fat bacon, and no great portion of *bread.*" p. 187.

The treatment, adopted in the early cases of diabetes, recorded by Dr Latham, is never mentioned. In the eighteenth case, the author "finds, by a memorandum on the back of his letter," that the infusion of cascarilla, with oxymel of squills, and tincture of cardamoms, was prescribed without benefit to the patient; and that, six weeks afterwards, a grain of calomel each night, with a tea-spoonful of equal quantities of the compound spirit of ammonia, and the camphorated tincture of opium, was ordered for him; during the use of which, together with some tonics, he recovered. Dr Latham thinks that the benzoat of ammonia, formed by the mixture of these two liquids, "might have something to do in his relief!" Subsequently to the pub-

lication of Dr Rollo's work, Dr Latham has had recourse to the animal diet, with chalybeates, especially the green mixture of Griffiths, medicinally; and in the last few cases that have occurred, he has likewise employed the phosphoric acid, "in doses from ten to twenty drops or more in common water three times a-day." This medicine appears to have diminished the thirst; but whether the water alone, or mixed with any other acid, might not have effected the same purpose, or whether the disease was in any degree alleviated by it, is somewhat problematical.

With respect to the animal diet, however, it does not appear to us that Dr Latham always enjoined a sufficiently strict exclusion of substances, containing saccharine matter, or its elements. Milk, and even asses' milk, was largely permitted in general. "I enjoined him a strict animal diet," says the author, in one case, "*with as much milk as he chose*," (p. 58.) In another, "he took *freely and largely of milk*, both *night and day*, to which he latterly added mutton suet; and his more substantial meals consisted of animal food, with a very small quantity of *bread*," (p. 159.) In another, a gentleman took *two pints* of cow's milk and *one pint* of asses' milk every day, and "a few thin slices of *bread* in the afternoon, (p. 185.) Now, it is certain that milk, and the milk of asses more particularly, contains a considerable quantity of saccharine matter; and as to bread, it has been found more liable to induce a recurrence of sweet urine than the ordinary vegetable diet, such as brocoli, spinage, cauliflower, cabbage, &c. "When these vegetables have been safely taken, a return to a very small quantity of bread," Dr Rollo remarks, "has reproduced the saccharine matter in the urine, and the general symptoms of distress, as thirst, &c." (Rollo, second edit. p. 405.) In one of the cases related by Dr Latham himself (p. 176), milk rendered the urine sweet; and the sweetness in the same patient was reproduced, after having disappeared, by eating the rind of an apple. So small is the admixture of vegetable matter which in some cases aggravates the disease, or even induces its recurrence!

Dr Latham has not had recourse to some other modes of practice which have occasionally proved successful: such as the free exhibition of Dover's powder, by which two cases were cured by Dr M'Cormick (Duncan's Med. Com. Vol. X.), and one by Mr Werner, who united with it the use of the warm-bath, (Lond. Med. Journal, Vol. XI. p. 221.); the employment of cinchona, uva ursi, and opium, as employed by Dr Ferriar with so much success, that he had not been induced to resort to the plan of Dr Rollo, (see his Essay on Digitalis); or the depleting method of Dr Watt of Paisley, now of Glasgow, which

Dr Latham casually mentions as having received some corroboration in one instance, when it was adopted in the Middlesex Hospital.

Very little that is worthy of remark occurs in the course of the very imperfect detail of facts which Dr Latham has furnished, and which we must ascribe to the inaccuracy of observation made in the hurry of practice, and the consequent "imperfect condition of his notes." In one of the cases, the urine did not exceed the natural quantity, but was so excessively sweet, "that it might easily have been mistaken for thin syrup;" and upon evaporation it yielded, *in good sugar*, at least a sixth part of the whole." (p. 147). This change of the quality of the urine, without any increase of its quantity, has been observed by other writers; and the inference as to the necessity of examining the urine, in cases of chronic emaciation, is obvious.

"Had not taste and the subsequent evaporation been employed," Dr Latham justly observes, "in one of the most remarkable cases which I have enumerated, the patient must have sunk into his grave, with his disease unknown to us; he would have been treated as labouring under an incurable marasmus, but the true cause of it would not have been ascertained. Such cases having occurred, will induce us, when symptoms even in a remote degree seem to indicate any thing diabeted, not to be too squeamish or fastidious in our inquiries, but to examine every circumstance that can by possibility afford us any information." p. 218.

This fact may account, in some degree, for the occasional oversight of the practitioner, where diabetes actually exists. A similar oversight may likewise occur, and perhaps does occur much more frequently, in consequence of the want of observation, in the patients themselves, or in the hypothetical notions that they are apt to form, both of which cause them to misinform and mislead their medical advisers. Thus, not having attended to the changes in the quantity or quality of their urine, (which have perhaps been very gradual); or, although they should have observed these changes, yet having ascribed them to their increased thirst, diminution of perspiration, or the nature of their diet, &c. they will often actually deny their existence in answering the interrogatories of the physician. So difficult it is to ascertain the truth, even from those who are most interested in communicating it! This is not a mere supposition, as every observing practitioner must be convinced from repeated experience. We therefore accord with Dr Latham when he says, "but I really believe that the diabetes has at all times existed much more frequently than it has been thought to do, and that it yet often exists where it

unfortunately eludes detection." p. 202. Indeed, in one case, Dr Latham overlooked the disease, until his organ of *smelling* led him to it, although he acknowledges that it was a strongly marked case. He had already prescribed for the patient, who was leaving the room, when the peculiar hay-like scent of his person induced the Doctor to call him back, and reexamine him, when he found his urine copious, pale, very sweet, and yielding on evaporation about a tenth of its weight of sugar. (p. 154–6.)

Unfortunately, however, the nature of this obscure disease is not to be ascertained either by *smelling* or *tasting*; and it is to be regretted, that, with the exception of occasionally evaporating the urine, no other *chemical* test was resorted to by Dr Latham; so that, in truth, we are not advanced one step in our knowledge of diabetes. Dr Latham takes for granted the conclusion of Dr Bardsley, that the *urea* is always absent from diabetic urine; although Dr Bostock, by a masterly analysis, had demonstrated its presence in the urine of two patients, in one of whom the quantity of *urea* discharged in twenty-four hours, was double the quantity usually discharged in health. * Neither is there any novelty in the leading point of Dr Latham's theory, which is a mere comment upon the notions of Dr Cullen and Dr Home, and which was as explicitly and more distinctly stated by Dr Marcet, in his inaugural thesis, in 1797. Indeed our author's only hope from his inquiries seems to be, "that some hypothesis favourable to the *present* improved *treatment* of diabetes may be founded thereon." (p. 106). But what advantage an hypothesis can confer on a known fact, we are altogether at a loss to understand. If any person were to fill a volume with analogies and suppositions "favourable" to the treatment of syphilis by mercury, who would listen to him for a moment? Or if medical men had contented themselves, on the first employment of that remedy, with framing hypotheses of this sort, instead of examining, by repeated and varied experiment, the effects of it under different forms and modes of exhibition, how widely destructive might that loathsome malady have still been! "Medicina non ingenii humani partus est, sed temporis filia." Had Dr Latham employed all those years in accurate observation, in noting the whole phenomena and progress of the disease, in all the varieties of it which he has seen, instead of framing hypotheses and collecting "scraps," he might have avoided the fate which he too correctly prognosticates, when he says, "I fear I shall become liable to the imputation

* See Memoirs of the Medical Society of London, Vol. VI. art. xxi. The presence of urea has also been observed by Dr Henry in diabetic urine. See Dr Ferriar's Med. Hist. and Reflect. Vol. I. p. 143. 2d edit.

of either having been very ignorant, or very inattentive, in having drawn such little profit from such very abundant experience." p. 129.

II.

Observations on the present State of the Profession and Trade of Medicine, as practised by Physicians, Surgeons, Apothecaries, Chemists, Druggists and Quacks, in the Metropolis, and throughout the Country of Great Britain. By JEREMIAH JENKINS, Esq. late Practitioner in Medicine. 8vo. pp. 140. London, 1810.

A Selection of Interesting Cases in Surgery, Medicine, Midwifery, &c. By a Society of Practical Physicians, Surgeons, Apothecaries, and Chemists, in London.

A Treatise on the Causes, Prevention, and Cure of the Gout; with Remarks on the Eau Medicinale, and a comparative View of the State of Medicine in Great Britain, France, and Germany. By J. DESGENETTE, C. M. pp. 34. London, 1810.

Familiar Instructions for the Management of the Teeth and Gums; in order to prevent Caries of the Teeth, and its consequences on the general Health of the Body. By J. P. HERTZ, Surgeon-Dentist. pp. 48. 1810.

A Familiar Treatise on Asthma, Difficulty of Breathing, Wheezing, Winter-cough, and Consumption of the Lungs, containing, with other information, explicit Directions for the Use of the Stramonium Herb. By —— FISHER, Surgeon, formerly an Asthmatic Invalid. pp. 42. 3d Edit. London, 1811.

A PERUSAL of the titles of this incongruous group of pamphlets, will probably excite some degree of surprise in our readers; and perhaps they will not easily divine, how any analogy or common principle can be discovered, upon which so many dissimilar subjects, and so many hitherto unheard of practitioners, should happen to be brought under our review together. And, in truth, on a superficial view, there seems to be as little resemblance between an English esquire, a German dentist, and a French C. M. (*Charlatan Malotru*, or whatever else he may be), as between gout, asthma, and carious teeth. Nevertheless, we do not de-

spair of satisfying the incredulous reader upon this head, and of producing a full justification of our arrangement. The dispensers of salve and pills have commonly assumed the character of mountebanks; but it would now appear that the character of harlequin is equally congenial with their trade. Indeed the advantages possessed by this frisking personage for such purposes are obvious. For by the aid of his agility and borrowed habiliments, the *Doctor* may distribute his various unguents and his roots, while his identity remains concealed from the careless gaze of the vulgar. He obtains by these means a sort of divisibility of person, by which, contrary to the common laws of matter, he can act where he is not, and in several places at the same time: he becomes, in short, by a polypus-like propagation, "himself a host," being actually multiplied into "*a Society* of practical physicians, surgeons, apothecaries, and chemists," by a mere extension of his own vitality!

How multifarious the advantages of this self-multiplication, of this plurality in unity, we need not farther declare; the pamphlets are sufficiently illustrative upon this point. The office of reviewing, puffing, quoting, advertising, and transcribing, is assumed by each and all, separately and collectively, in regard to one another; but the efforts of each and all, somehow or other, converge in one focus; namely, in the recommendation of the "Medical Guide," and other avowed productions of *Doctor* Richard Reece, and in a reference to the chemical shop or shops of *Dr* Richard Reece! the centre and parent stem, it should seem, of this polypous society! the harlequin of this medical masquerade!

None of these pamphlets, indeed, are exactly what they profess to be: but they all accord most accurately, (often miraculously using the same expressions), in the steady pursuit of several specific objects; in a systematic attempt at levelling all the distinctions of learning, philosophy, and moral excellence in the profession; in a course of abuse and calumny against all "regular" physicians, and against several individuals in particular, both physicians and surgeons, who are distinguished by their writings and elevated in public reputation;—in railing at quacks and quackery,—at Buchan, Willich, and their domestic medicine;—and in recommending certain *drugs, to be had at the aforementioned shops*, for the cure of gout, asthma, carious teeth, &c. respectively,—and in praising the superlative excellencies of the two "domestic" treatises of the aforesaid *Dr* Richard Reece.

As an example of the effectual scheme of mutual puffing, contemplate the following round-robin. Jenkins begins (p. 1.) by extolling the "Selection of Interesting Cases," and the "Monthly

Compendium;" and he concludes by praising the same works, after having quoted and commended the "Medical Guide" by the way. Surgeon Fisher lauds Jeremy Jenkins, and the "Medical Guide;" and at the conclusion advertises the said Jeremy's pamphlet, with those of *Herr* Hertz, and *Mons.* Desgenette. Mons. Desgenette again is lavish in his approbation of the aforesaid Jeremiah; and Herr Hertz, after expressing his great obligations to the "Medical Guide," and referring to the "Medical and Chemical Hall," concludes with an advertisement of all the pamphlets at the head of this article,—of the two "domestic" medical works, the treatise on Rhatany root, and the catalogue of drugs, of Dr Richard Reece,—together with the first ten numbers of the "Medical Observer," and the *New Testament!* * Dr Richard Reece is of course not deficient in politeness; and in his last edition of the "Medical Guide," as well as in his "New System of Medicine," † he bears repeated testimony to the merits of the "Monthly Compendium," the "Selection of Interesting Cases," &c. not forgetting the medicine-chests prepared and sold by him at the Chemical Hall! Such is the amicable reciprocity of praise, such the unity of purpose which pervade these various pamphlets.

> "——————— facies non omnibus una,
> Nec diversa tamen."

It may be necessary to inform our readers, in order to illustrate the foregoing statement, and to explain the *genealogy* of some of the works referred to, that this gentle chemist was the prime mover of a journal, called the "Medical Observer," which was unfortunately wrested from his hands by a partner, whom he had engaged in it. He then commenced another, under the title of the "Medical Spectator," of which a few numbers were published; but not exactly suiting the public taste, this journal was given up, and the numbers remaining in the publisher's hands, being bound up, were henceforth denominated, "A Selection of Interesting Cases," as above mentioned: and now a small successor, under the title of Monthly Compendium, is carried on, containing analyses of *Doctor* Reece's publications, Dr Reece's catalogue of drugs, together with a few elegant epistles, destined to overwhelm the reputation of those ignorant persons, called regu-

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* This is appropriate; for Dr Richard's domestic medicine, "is published *chiefly* for the use of *the clergy, under the sanction of their Graces*" three Archbishops, and fourteen Bishops!! (Med. Guide, p. viii.)

† Reviewed in our last Number, for January 1, 1811.

dar physicians, as if by so many charges of fulminating powder. *

Now, the pamphlet of this second Jeremiah is avowedly "taken from a late publication, entitled, 'A Selection of Interesting Cases,' &c." (p. 1.) *i. e.* it is a second repetition of papers contained in the "Medical Spectator!" It is occupied entirely with strictures upon the conduct of the college of physicians, in London, and with an abuse of the education of medical men, as conducted at the English universities, and a praise of apothecaries, and of the "schools of pharmacy and surgery," (see pp. 3, 14, 115, 117, &c.): topics which are treated almost in the same terms in the "Medical Guide," (pref. x, xiii, &c.), in the pamphlet ascribed to Fisher (p. 33), and in that with the name of Desgenette (p. iii, &c.) Jenkins (p. 11) and the Medical Guide (p. ix.) assert, that "domestic medicine is the parent of regular medicine;"—they both complain of the dreadful adulteration of drugs, and agree with the "New System of Medicine" in the recommendation of Reece and Co.'s shop as the great repository of genuine drugs; (see Jenkins, p. 76, and 107; Medical Guide, p. xi. pref. and New System, pref.); and, among other curious coincidencies, both Jenkins and Reece aver, that they have had "the care of a provincial infirmary during six years," (Jenk. p. 64; Med. G. p. xi.); but in what capacity, they cautiously omit to mention.

The work of M. Desgenette curiously coincides, in various opinions and expressions, with the "Medical Guide," and the "New System," as well as with the pamphlets of Jenkins and Fisher. With the first (M. G. p. ix.), it informs us (p. v.) that physicians are the mere "appendages of luxury;" and that their practice consists "in making merchandise of the miserable;" (M. G. p. xiii. *note;* Desgen. p. x.); and, in unison with all the rest, it levels its abuse at the universities, (p. iii. &c.) Again, with Fisher (pref. i. and p. 33.), and Jenkins (p. 15. &c.), it vents its fury upon "*regular* physicians" (p. iii. and 19.), and expresses its contempt of the useless knowledge of the dead languages, being puzzled to discover what they "have to do with the practice of medicine," (p. iii.); while Jeremy exclaims, "Of all acquirements, *sure* the knowledge of the dead languages is the most useless!" (p. 47.) Moreover, this Mons. Desgenette (p. v.) and

* We understand, too, that this extraordinary drugseller has multiplied his local habitations, as well as his names; and that the inscription "Reece, Burgess and Co.," which appeared on a shop in Parliament Street, Westminster, was speedily replaced by that of "Foster and Co." under which firm the sale of the medicines, advertised by the pamphlets of Fisher and Desgenette, is carried on.

Dr Richard Reece (New System, *pref.*) accord in the assertion, that the name of Doctor "is a title too often assumed merely as a claim to a fee;" they both talk about "the cerebral system;" and they both break Priscian's head, in the use of certain Latin words, as thus; "the stamina *happens*," (p. 24.)—"the stamina *is*," again and again, (*ibid.*) &c.—But we forbear;—although it would be easy to extend this catalogue of coincidences, were not the point already established.

We have said that these pamphlets are not exactly what they profess to be. Instead of finding a treatise on gout, in that which bears the name of Desgenette, we meet with a number of loose observations respecting the *eau medicinale*, and many sneers and calumnious insinuations against Dr Jones, who introduced the medicine from France; which at length terminate in the assurance, that the true *eau medicinale* is to be had at the shop of Messrs Foster and Co.—In like manner, the pamphlet, signed by Fisher, so far from containing a general treatise on asthma, &c. exhibits a brief detail of a case, said to be that of the author, interspersed with malignant observations against regular physicians in general, but particularly against Dr Robert Bree, the respectable author of a treatise on disordered respiration, and against Mr Abernethy, whose name is too well known to our readers to require any comment from us. All this terminates in the recommendation of the stramonium, and in announcing that "the prepared stramonium and oxymel may be obtained of Messrs Foster and Co. 34, Parliament Street, Westminster." (p. 42). We have only to add, that the pamphlet attributed to Hertz contains sixteen pages of common-place observations respecting the teeth, for which the writer confesses himself to be indebted to the "benevolent author" of the Medical Guide; and the most important "instructions" here delivered consist in recommending, as a tooth-powder, the charcoal made from the *areca*, or *betel-nut*. The remainder of the pamphlet is made up of long extracts from Millar, and Gerard, descriptive of this species of palm, and of the piper or betel-plant; a short transcript from the "Medical Guide;" and two or three letters. At page xiii, the writer says, "The areca charcoal I procure from No. 20. Bedford Street, Covent Garden;" namely, at Reece's shop. In the copy before us, this address is inserted in manuscript.

We cannot conclude, without adding a few remarks on the proceedings which we have above developed. We trust that we shall not be considered as having compromised the respectability of our critical function, by stooping to expose a system of advertisement and traffic which sets all truth, candour, and decorum at defiance, which is pursued with a most jesuitical method and

perseverance; and which, uniting calumny with falsehood, aims at vilifying and degrading our art and its honourable professors in the estimation of the world. We conceive that, however contemptible in its origin, and however impotent in its result, such a scheme of public deception and public abuse, such a plan of systematic imposition and hypocrisy, merits exposure, and calls for the execration of every honourable mind; for who can suppress the indignation that rises with his contempt, when he detects a calumniator, administering by his sordid arts to the malignant passions of mankind, and at the same time accusing his profession of the highest illiberality, (see Fisher, p. 11, &c.); when he sees him methodically vilifying the titles of professional dignity, and at the same moment assuming them as the great engines of his own emolument; when he discovers the ungrateful endeavours by which he would undermine the edifice that affords him subsistence, shelter, and security;

> "And, like a maggot in a sore,
> "Would that which gave it life devour?" HUDIBRAS.

Yet it is thus that this manufacturer of medicine-chests struts in the title of physician, which he spares no labour to degrade; it is thus that the *soi-disant* surgeon Fisher, while he calumniates Dr Bree, and affects to confound his name with that of Martin Bree of empirical notoriety, assumes his character of experience, from having been "formerly an asthmatic invalid;" and it is thus that the pretended Desgenette, after venting his abuse on Dr Jones, makes use of the medicine, introduced by that gentleman, as an instrument of his own emolument! But the hypocrisy does not end here. Under the pretence of deprecating the medical degrees, obtained without medical study in the English universities, and the corporate monopoly of the London College of Physicians, the general malignity of design against all that is reputable and distinguished in the profession, with a view of bringing it down to a base level, is manifest throughout the plan. For while the graduates of Dublin, Edinburgh, and Glasgow, are professedly excepted from the censure (Jenkins, p. 64.), and while the "school of surgery and pharmacy," is every where extolled as the only source of medical science, individual physicians (and even surgeons) of reputation, who never saw an English university, are treated with the most unremitting slander and abuse, (such as Dr Saunders, for example, Dr James Curry, and many others; Mr Abernethy, &c.); and as for their brother apothecaries and chemists, Reece and Jenkins have no mercy on their characters. The practices of adulteration, substitution, and blundering, are so universal among them, it is

averred, that no prescription is any where accurately prepared! "I will undertake to prove," says the prophetic Jeremiah, "that there is scarcely a shop in London, that is stocked with genuine drugs."—"With such nicety are prescriptions compounded in London, that if one prescription be made up at thirty shops, the medicine shall be different, either in consequence of the substitution of one drug for another, the use of adulterated drugs, or some mistake!!" (p. 76. *note*). Yet this is the "only school" for accuracy and medical experience! *Doctor* Reece, "benevolent" creature! was so poignantly affected with this dishonest traffic of his brethren, that he opened his shop from mere patriotism, in order that his sick countrymen might no longer perish from the want of unadulterated drugs! and that they may not perish from ignorance of his repository, the system of publication and advertisement, which we have now described, was not less patriotically adopted!

Be it remembered, however, that we have nowhere accused this renowned patriot of being the writer of all or any of the pamphlets above noticed, nor even of writing the Medical Guide, or the Domestic Dictionary, or any other work. We do not assert that he has no partners or journeymen in literature, as well as in drugs. We are satisfied with having traced the coincidencies, and exposed the system, carried on by these pamphlets; a labour which we should not perhaps have undertaken, had not some respectable journals entered incautiously into a support of the system, probably by inserting critiques, sent from the editor * with a copy of this or that work, without proper inspection; and had we not been aware, that

> "The dullest idiots in disguise
> Appear more knowing than the wise;
> Illiterate dunces, undiscern'd,
> Pass on the rabble for the learn'd;
> And cowards, that can damn and rant,
> Pass muster for the valiant:
> For he that has but impudence,
> To all things has a just pretence,
> And, put among his wants but shame,
> To all the world may lay his claim,"—Butler.

* In one case, at least, we *know* that this was done in regard to the "New System of Medicine."

III.

An Inquiry into the Causes producing the extraordinary Addition to the Number of Insane, together with extended Observations on the Cure of Insanity; with Hints as to the better Management of Public Asylums for Insane Persons. To which are annexed, some necessary Observations, in Reply to Dr Andrew Halliday's Remarks on the present State of the Lunatic Asylums in Ireland. By WILLIAM SAUNDERS HALLARAN, M. D. Senior Physician to the South Infirmary, and Physician to the House of Industry and Lunatic Asylum of Cork. 8vo. pp. 111. Cork, 1810.

IT is naturally expected that we should give some account of a book like this, written by such an author, upon such a subject, with such a title-page, at such a time as the present. Alas! this inquiry affords another lamentable instance of the truth of a remark which we made upon a similar occasion, some years ago, either of the impossibility of writing any thing satisfactory on Insanity, or the propensity in some men to choose inadequate means to attain a very good object. Dr Hallaran is physician to the Lunatic Asylum at Cork, and he urges the plea of *very extensive practice in this department of his profession* (as the phrase is), for this publication. Let him have the usual reward of indulgence to moderate scholarship, and let him long enjoy his local reputation; but whilst we thank him for the few facts which he has communicated, we lament that he has wandered so much from his text. In place of inquiring into the causes which have increased the number of insane, he sets out by telling his readers, that a principal object of this essay is to point out the distinctions and the remote causes of insanity which have heretofore escaped the observation of authors. The moderns seem to think it very safe to prefer themselves to the ancients, who cannot be present to maintain their own claims; but it cannot be disguised, that every treatise on insanity abounds with the very same distinctions and divisions, conveyed in the identical words, *mental* and *corporeal*, *physical* and *moral*, which mean about as much as Dr Hallaran's first section. That insane persons are more frequent in Ireland now than formerly, seems to be taken for granted. No tables

are given to show such an increase, and no document produced to establish so important a point. The asylum at Cork, when Dr Hallaran was appointed physician to it in the year 1789, was not capable of accommodating more than 40 or 50 patients; it now contains 163, and it is acknowledged this number is by far more than it can conveniently hold. Of these 163 patients, 40 are reported to be under cure, 82 incurable and idiots, 41 convalescent. The want of accommodation might be the reason why the number was less twenty years ago than at present; and there is not room enough, even now, it is said, for the admission of applicants, whose actual number is not accurately ascertained. That point, however, is assumed, and the increase of insanity is attributed to the late unhappy disturbances in the country, and to the wide-spreading evil of dram-drinking. Upon both these topics the author dwells with becoming feelings of regret and indignation; but surely he ought to have considered the progressive increase of population in Ireland, and particularly the commercial advancement of Cork, before he pronounced madness to be *endemic* during these last twenty years.

In speaking of religion as one of the causes of insanity, Dr Hallaran states the following circumstance:—

——"In the public asylum under my care, which is inhabited by Roman Catholics in the proportion of ten to one of the Established Church, no instance, within my recollection, of mental derangement has occurred amongst the former, occasioned by terror from religious enthusiasm; whilst several of the latter persuasion have been under cure, and many of the sectarian class." page 22.

More than half the pages which ought to have been devoted to the fulfilment of the promised inquiry held out in the title, are filled with the *Method of Cure*, a very unpropitious theme to descant on through sixty pages; especially after hastily quitting what offered so much room for useful information.

The most remarkable feature in his method of cure, is this experienced author's confidence in the powers of drugs. He speaks in raptures of the efficacy of tincture of digitalis, in real maniacal cases, and prescribes it with as much confidence as he would mercury for the cure of syphilis, page 75. He confirms the popular prejudice, of the insensibility of maniacs to the operation of the common doses of emetics, which is contradicted by Mr Haslam's great experience, and by many trials of our own. He talks of the extreme difficulty of administering medicines and food to lunatics, which is the common talk among private practitioners in the mad line; but we never found it in a well-regu-

lated public institution; and where it exists, we attribute it to want of proper influence and dexterity on the part of the keeper or master. We are therefore not disposed to sympathize in Dr Hallaran's joy at the happy discovery, as he considers it, of the circulating swing suggested by Dr Cox. As an antimaniacal remedy, he says, that it has entirely failed; all the rest of its supposed merits may therefore be lodged on the same shelf with the quackery of former days.

The Appendix is short, and contains a reply to some animadversions made by Dr Halliday on the state of the lunatic asylum at Limerick and Cork. Granting that some partial exaggeration has been admitted, the facts contained in this appendix prove, that great inattention to poor lunatics prevails throughout Ireland.

IV.

A Dissertation on Insanity; illustrated with Tables, and extracted from between Two and Three Thousand Cases in Bedlam. By William Black, M. D. pp. 82. London, 1810.

The substance of this dissertation was published several years ago, in an arithmetical treatise on the diseases and mortality of the human species, by the same author. We are glad to hear that he has not abandoned his plan, to exhibit the births of the human species, and the mortality of all ages over the globe; then the diseases and accidents by which they are swept away; and to reduce the whole, together with the remedies and modes of cure and prevention, to arithmetical proof. Since the first appearance of these facts and tables, collected by Dr Black from the notes of the late Mr Gozna, the apothecary of Bedlam, the public have been furnished by Mr Haslam with a most valuable work from the same extensive source; and it is not easy to discover any important end which can be attained by so short a dissertation as the present, in a separate form. Madness is at this time a royal malady, and therefore a popular subject; and the age we live in is an advertising age. The observations which Dr Black has made upon insanity, and the predisposing causes, are not likely to raise his own reputation, or to afford much information to his readers. The following tables may suggest some

useful reflections to those who are engaged in inquiries of this sort.

" Admitted into Bedlam, from 1772 to 1787,

Under 10 years of age, - -	1
From 10 to 20 - - -	132
20 to 30 - - -	813
30 to 40 - - -	908
40 to 50 - - -	652
50 to 60 - - -	266
60 and upwards, - - -	78

" Of the above number, were denominated,

Mischievous - - -	743
Not mischievous - -	886
Attempted suicide - -	323
Committed murders, upwards of	20

Page 14.

" Table of the Cured, &c. in Bedlam, from 1772 to 1787.

Cured - - -	924
Incurable - - -	1694
Relapses - - -	535
Deaths - - -	250 "

Page 24.

V.

A Practical Treatise on Tinea Capitis Contagiosa, and its Cure; with an Attempt to distinguish this Disease from other Affections of the Scalp: and a Plan for the Arrangement of Cutaneous Appearances, according to their Origin and Treatment, including an Inquiry into the Nature and Cure of Fungi Hæmatodes and Nævi Materni. The whole exemplified by Cases. By W. Cooke, Surgeon, London. Printed for the Author. 1810.

We cannot venture to surmise the alarm which the *Nobility* on this side of the Tweed would suffer, were they to find the names of the different members of their family printed in full length, as victims to Scald-head, a disease which is generally considered as the offspring of filth ! ! neither are we at all certain

what our English neighbours will think on this subject. The first page we happened to turn up in this work, contained the name of a Noble Earl's daughter, afflicted with some such complaint! and we cannot avoid taking this opportunity of strongly expressing our displeasure at the conduct of those medical men, who appear to be lavish in the introduction of names, places of abode, and such like frivolous circumstances, in the histories of cases. Such practices cannot surely have the improvement of the medical profession for their object, but must have some views which cannot merit the approbation of those who assume a high tone of professional reputation and honour. Mr Cooke, though he has in the most palpable manner committed this fault, before detailing the cases, makes the following remarks, which shows how well aware he must have been of the feelings of his patients.

"It has been a source of much regret, that I have *not* been permitted to publish the names of *all* the patients to whom the following cases relate; but the nature of cutaneous diseases being generally considered as indicative of an hereditary and constitutional disease, *insuperable* objections have been made by some persons to my wishes, though I urged every possible argument in support of the *propriety* of my request."—p. 222.

Notwithstanding all this, our author has managed to give the names of two Lords, and two Right Honourables.

In attempting to give our readers any analysis of this work, we find insurmountable difficulties; for the author has neither taken the trouble to prefix a table of contents, nor to add an index. The length of the title-page he probably deemed quite sufficient. He has contented himself with tying together pieces of MS. on a variety of subjects, without any order or arrangement (probably as they happened to be accumulated on his desk); and to have completed his undertaking, by patching to the end of each page a passage from Hippocrates, Celsus, or some old author, to manifest to the public the depth and extent of his learning. Nor do we conceive that there are any observations in this medico-chirurgical melange which are worthy of our serious consideration; and we do not at all conceive it incumbent on us to attempt to trace the numerous sources of error into which Mr C. has fallen. Though evidently unacquainted with the minute anatomy and functions of the parts composing the integuments, he has given a *new* arrangement of cutaneous diseases, according, as he says in the title-page, "to their origin and treatment." He cures fungus hæmatodes (or what other authors have termed *Warts*) by ligature; and *he proposes* to cure *nævi materni*, by making an incision along their surface.

VI.

Physiologisch-Anthropologisches Lehrbuch, für Gymnasien und Schulen, bearbeitet. Von LORENZ HEINRICH WAGNER, Adj. Colleg. Professor am Christian-Ernestinischen Collegium, und Ober-Bibliothekar der Konigl. Geschafts-Bibliothek zu Bayreuth. 8vo. p. 228. Bayreuth, 1809.

THE principal object of this publication is to exhibit such a view of the subjects and the arrangement of a course of lectures, as may facilitate the study of anthropology. The author has availed himself of the valuable works of Haller, Loder, Ith, Plattner, Schmid, and others of his countrymen, who have contributed to render the study of the animal economy a very general and favourite topic in all their universities and places of education. In the execution of his design, Professor Wagner has taken a wide range; but he has stated very concisely under each head, a few fundamental facts and principles which require to be impressed upon the memory. He has not attempted any thing like a systematical arrangement, but has enumerated the leading circumstances relating to the physical and moral peculiarities of the human species; and he has considered them under three great divisions, which are again subdivided into numerous heads.

The physical history of man from his birth to his death, comes first to be considered; then follows a philosophical description of the attributes and powers of organized bodies, of the distinction between animals and vegetables, and of the superiority of mankind over the rest of the creation.—A sketch is next given of the nature of the materials which compose the human body; the structure and functions of the bones, muscles, ligaments, blood-vessels, lymphatics and integuments, are described.—The vital functions, or those without which animals could not exist, come next under consideration; the circulation of the blood; respiration and nutrition; and then the organs of sensation, and the organs of speech. After these particular investigations, the author proceeds, in the third and last division, to the more general peculiarities of the human species; he points out the differences produced by the birth of the young among mankind, and by the long period of infancy: he notices also the strength and vigour of the human constitution, the versatility of its nature, qualifying man to subsist in every variety of climate and upon every diversity of food, while the inferior animals are con-

fined within certain limits. Man's upright posture, the beauty of his form, the expression of his countenance, his physiognomy, the variety of his active powers, and his susceptibility of improvement, are the subjects which form the conclusion to this useful volume.

The science of man is too little cultivated amongst us, and the study is too much confined to young men destined for the practice of medicine. The whole subject naturally divides itself into two separate parts; the first of an historical nature, the second is a practical inquiry: these two parts are intimately connected, yet they are perfectly distinct: and although it is of infinite importance in the practice of medicine, that we should be well acquainted with both, because, from the history of the healthy functions, we learn how to regulate them when they are disturbed by disease; yet to the general student, the historical division presents itself most obviously.—By proper regulations, and proper elementary books, all academies, as well as all hospitals, might be easily converted into so many small schools, for teaching the natural history of man. Voyages and travels would have their interest and utility doubly increased, by showing the influence of climate, food, and other external circumstances upon the human frame; and travellers would have their attention directed to the most important objects of inquiry, if they were early made acquainted with the physical knowledge of themselves and their species. Physiology is as intimately connected with moral philosophy as with medicine, and deserves to be studied by those who devote themselves to the one or to the other. Its close alliance with medicine does not seem to have assisted the improvement of our knowledge of the animal economy; it has rather impeded its progress. Let physiology then be cultivated by all the lovers of scientific pursuits, without thinking of fistula or fever; and let us hope, that, like chemistry, when emancipated from Galen and gallipots, it will advance with rapid strides to the same high station among the sciences.

VII.

Abhandlung über den Kinnbackenkrampf neugeborner Kinder, nach eigenen Beobachtungen und Erfahrungen am Krankenbette. Von Joseph Schneider, der Philos. Doct. prakt. Arzt in Fulda, 132 S. 8vo.

Convulsions of new-born children (*trismus nascentium*) is so common a disease in Germany, that the author of this treatise, and another writer in a celebrated periodical work (Allgemeine Lit. Zeitung) boast of having had considerable experience in observing it. In the town of Fulda, where Dr Schneider resides, he was called to six cases of trismus, within fourteen days, in the month of March, 1802. A midwife of the same place has seen more than sixty cases of trismus infantum, in the course of nine years. Although the situation of Fulda is considered to be more healthy than many other large towns and villages, yet trismus prevails more there than in other places. This is attributed by our author to the evaporation from a river which runs through Fulda. But there are few towns without a river; and the houses adjoining water, do not appear to be more liable to the visitations of this malady, than those which are removed from the moist effluvia. *Sauvages* indeed says, "Hic morbus hieme et cum aurâ humidâ sæpius advenit quàm siccâ æstate."—Nosol. Method. Vol. I. p. 531. We are disposed to think the disease is more likely to be excited by hot and unventilated chambers, and by overloading poor infants with an inordinate quantity of clothes. It is common among infants at Cayenne, Minorca, and hot countries, and prevails most in those parts of Europe, where rooms are heated by German stoves, and children are still oppressed by swaddling clothes.—The most fearful period of attack, is from the second to the seventh day after birth; about the time of the navel-string separating; it seldom occurs after the ninth day. The strongest and healthiest children are most liable to be affected. The remedy recommended by Dr Schneider, is a compound tincture of musk and ambergris, of which the following is the formula used at the Bamberg hospital; and it is held in high estimation by foreign practitioners in all spasmodic diseases.

℞ Ambr. gris. ʒj.
Æther. vitr. ℥ss. Stet per hor. xii. sæpe agitando, dein adde

Mosch. ʒj.
Liq. anod. min. Hoff. ʒiij. M.

The dose is not mentioned; the omission perhaps may be pardoned, when we reflect upon the state of the patients, the symptoms of the disease, and the opinions of its fatality which prevail amongst nurses.

VIII.

Medical Histories and Reflections. By JOHN FERRIAR, M. D. 3 vol. 8vo. New edition. 1810.

THE nature and object of this work is well known to be in imitation of Dr Home's two valuable publications, and to consist of clinical or practical commentaries on the cases which came under the author's care. To this new edition there are fewer additions than were expected. Since events lead to experience, and experience to improvement, we regret that Dr Ferriar has been prevented from publishing the results of his enlarged experience of seventeen years.

Under the head *diabetes* some additional observations are given, confirming the author's former plan of treating the disease as a disease of debility. The medicines employed were a combination of Peruvian bark, uva ursi, and opium, in the proportions of a scruple of each of the former to half a grain of the latter, four times a day. The doses were taken with lime-water, which was also directed for the patient's common drink. Three cases of confirmed diabetes mellitus are reported *cured* by this plan. Some tables are given to show the increase and subsequent diminution of the urine during six months; but the quantity of drink, or liquid and solid ingesta, is not stated; therefore the tables are of little or no use:—they furnish no inference but what is universally known; and they fail to show the only particular circumstance which is at present disputed, viz. the relation which the quantity of drink bears to the urine discharged. The blood and the urine of one patient were analysed by Dr Henry; he detected *urea* in the diabetic urine, and nothing particular in the blood.

Some additions are made to the chapter on epidemic fever. We shall quote them for the benefit of our readers, and especially for those who possess the first edition of this work.

"The fever generally prevalent in Manchester, and the surrounding country, is a mild typhus. But in particular seasons, it is attended by symptoms which are not clearly indicated by practical writers, and which I think it proper to mention, because they are equally unexpected and distressing to the practitioner.

"In the second or third week of typhus, when the fever appears moderate, and the probability of recovery is strong, a sudden determination takes place to the head or breast, sometimes to the bowels, accompanied with extreme pain, and the patient is carried off in the course of a few hours. I have seen the metastasis, in the genuine typhus, and in very young subjects, as rapid as the translations in gout. If the patient survives these attacks, the fever sometimes changes its type. In one case, where a typhus was unusually protracted, after several hazardous determinations to the stomach and bowels, the fever assumed the form of an intermittent, and the patient was recovered with great difficulty, by the use of the strongest stimulants.

"The frequency of such accidental metastasis as that I have described, in our fever-wards in 1805, and the spring of 1806, was truly alarming. Dissection threw little light on their nature, and only served to show that they depended more on changes in the nervous, than the sanguiferous system.

"Towards the end of autumn, we are generally visited by remittent fevers; and I scarcely recollect a season, in which some obstinate cases of this nature have not occurred, which resisted all the usual methods of cure. A succession of melancholy events of this kind induced me to look for a more powerful tonic than bark or steel; and, from the analogy between intermittents and remittent fever, I turned my thoughts to the employment of arsenicum album, for the revival of which, as a medicine, the public are indebted to the late Dr Fowler. I soon had occasion to employ it in some very dangerous and tedious remittents, and I found it a safe and certain remedy. It generally lessens, if it does not suspend, the second paroxysm after it is exhibited, and it effects the purpose without producing the slightest disturbance in the habit. I have generally given, to an adult, five drops of the saturated solution, every four hours, and I have seldom found it necessary to exceed this dose.

"In one case, where I ordered this remedy, the remittent had continued six weeks, in another, nearly two months, without any abatement of the symptoms; and both patients were sinking fast into the grave, when they were saved by the use of arsenic. The only sensible effects produced by it, are the removal of the crust on the tongue; the appearance of a sediment in the urine; and increased firmness of the pulse.

"Having frequently experienced the efficacy of this medicine in remittents, I was induced to try it in the last stage of typhus, when neither bark, wine, or brandy, cold-bathing, or occasional doses of Cayenne pepper, had the effect of rousing the powers of life, or of

lessening the thick crust, which lay like a black marble slab on the tongue. With such cases, every man in extensive practice must have met; it has often been my lot to encounter several of them, in the course of a few weeks. I found that the arsenical solution uniformly cleared the tongue, in two or three days, and that the fever gave way rapidly afterwards. The favourable alteration, after the change of medicines, was too great to admit any doubt respecting its cause; and the number of such events which I have witnessed, leaves no room for uncertainty. It is a singular advantage, attending the use of arsenic, in these cases, that it does not operate as a general stimulant, but merely as a sound tonic. Neither the concomitancy of cough or dyspnœa, therefore, prohibits its use in typhus. The only contra-indication is a tendency to diarrhœa, or nausea. Yet I have been able to give the solution in the dose of two or three drops for a dose, even when the bowels have been very irritable, by combining it with a small quantity of laudanum.

"As soon as the feverish paroxysms are stopped, I think it prudent to suspend the use of the arsenical solution, and to support the patient with bark, and different cordials. But I never saw any inconvenience from the use of the mineral, excepting a slight soreness of the throat and lips.

"I also make it a rule to delay the exhibition of this medicine, till it is evident that the usual remedies are not likely to succeed: in producing an agent of such powers, there ought to be a "dignus vindice nodus;" and its administration ought to be considered as a matter of solemnity, as its abuse would prove so extremely pernicious, in rash and ignorant hands.

"In the course of the last twelve months, I have met with some cases of typhus, in which there was a very distressing dyspnœa, which continued during the whole fever, without any appearance of inflammation. In general, the difficulty of breathing was continual, though aggravated during the febrile exacerbations; but in one case respiration was perfectly free, during the intervals of the paroxysms, and regularly became very difficult on the return of the hot fit.

"In these circumstances, which precluded the use of bark, I had recourse to the extract of the ratania root, lately introduced (at least lately known by that name) from South America, and I have found it a valuable substitute for the cinchona. The intense bitter of the extract is softened to an agreeable astringency, when it is dissolved in water (by the intervention of a little alcohol), in the proportion of from five to ten grains to an ounce, and its effects on the patient's strength and spirits are peculiarly cheering. Its flavour, in this state, strongly resembles that of port-wine, and its operation in fever appears to me very similar.

"The extract of ratania, notwithstanding its sensible quality of astringency, does not produce costiveness; in this respect also, it frequently merits a preference to Peruvian bark.

"Since the establishment of our fever-wards, I have carried the

practice of cold-bathing to a considerable extent, in the latter stage of typhus, and in the commencement of scarlatina anginosa.—I shall make some observations on this subject in the third volume."

In the second volume, we find some additional practical remarks introduced, in describing the remedies of dropsy. Dr Ferriar's late experience has confirmed his opinions delivered in his former publications upon this subject. He has adopted a remedy with considerable advantage, which consists of several liquid diuretics combined; and though the formula appears a farrago, it seems well entitled to be more extensively employed. It is as follows.

"℞. Oxymel. colchic.
——— scillæ.
Tinct. nicotianæ.
Spir. æther. nitros. ää p. æ. Misce.
Capiat cochleare parvulum, ex aquæ pauxillo, quater in die.

"When an additional stimulus is wanted in debilitated habits, about ten drops of tinct. cantharid. are added to each dose. The usual quantity of cream of tartar is given early every morning, and the patient begins to use the diuretic drops in the forenoon. In very costive habits, it is sometimes advantageous to add a portion of syrup of buckthorn to the farrago; and I frequently join the tincture of digitalis to it, in such doses as the patient can easily bear." p. 200.

Gamboge, tincture of lytta, and extract of elaterium, are recommended as powerful diuretics. Two things have often surprised us in reading over this learned author's histories and reflections upon dropsy; first, the prodigious number of cases in a given time; and, secondly, the readiness with which they yielded to the treatment employed.

The concluding paragraph of the paper on the effects of pneumatic medicine is omitted, and the following substituted in its place.

"All hopes from this source are now completely abandoned. I had occasion, some years ago, to observe to the late Dr Currie of Liverpool, that the chemical theory of diseases was merely the humoral Pathology elevated in the form of vapour, in which he agreed with me," p. 279, but in which we do not, because no reasons are given.

At the conclusion of the second volume, a controversial appendix is with great propriety omitted, and the author's valuable essay on Digitalis is inserted, much to the credit and advantage of this second edition of his works. The merits of that essay are too well appreciated to require any commendation at this time; it deserves repeated perusal.

The third volume commences with an essay on rabies canina, with the addition of two cases by Mr Cock, surgeon of Ashton

under Lyne, which terminated fatally. As there was no reason to suspect the existence of canine madness in the town or neighbourhood, excepting in the animal which bit these persons, Dr Ferriar thinks "the statement affords full proof of the sporadic origin of the disease in dogs, contrary to the opinion proposed by Mr Meynell, and inconsiderately adopted by one or two medical men. That opinion might indeed be refuted by the now established effect of fever-wards, which are capable of arresting the progress of an epidemic, by separating the sick, but which do not prevent the sporadic generation of infectious fever in individual cases," p. 60. But to this remark it may be objected, in the first place, that the laws which the contagion follows in animals are hitherto very imperfectly ascertained; and, secondly, the effect of fever-wards is a comparison, but not an argument. To prove his point, Dr Ferriar should show, that small-pox and syphilis have a sporadic origin.

The following extract from the account of fever-wards will be read with lively interest by those who watch the improvement which has taken place within these few years in the management of infectious diseases.

"The success attending the establishment of our House of Recovery, has exceeded the warmest expectations of its supporters. But during several years, we were limited in space, and unable to receive the whole number of patients, whom it was expedient to admit. Some adjoining and neighbouring houses were therefore occasionally engaged in the same street, for the admission of patients; and thus, without any previous intention on our part, a set of experiments was made respecting the distance to which contagion will extend. In the first instance, no person suffered in the neighbouring buildings, where the street was only four yards wide, the windows of the occasional fever-ward being generally open, and the house full of patients. In another instance, a house, capable of containing twenty-five patients, not at all separated from the adjoining houses in the same row, was used for twelve months as a fever-ward, without the occurrence of any fever in the immediate neighbourhood. Thus the *experimentum crucis* has been tried, and the innocence of contagion, when properly diluted with atmospheric air, is fully established.

"So completely were the public now convinced of the utility of the plan, that a subscription, suitable to the opulence and spirit of the town, was raised; a large area was purchased, and a Fever-Hospital erected, capable of easily containing an hundred patients. The expense of the building was upwards of 5000*l.*—Since it has been in the power of the Physicians to admit every case of infectious fever, as it occurs, we have felt ourselves completely masters of the disease. Epidemic typhus is now unknown to us, while it has been raging in some of the neighbouring towns. A part of the space is appropriated for the reception of patients in scarlatina anginosa; and although

this disease has been repeatedly introduced into the town, generally from Liverpool, and lately from Yorkshire, its progress among the poor has always been checked, by the removal of the patients."

The mortality of fever-patients has varied considerably in different years, as the following table will show.

Years.	THE NUMBER OF PATIENTS.				Proportion of Deaths.
	Admitted.	Cured.	Dead.	Remaining at the end of each year.	
From 1796 to 1797	371	324	40	7	1 in 9†
1797 — 1798	339	300	16	23	1—20—
1798 — 1799	398	360	27	11	1—14†
1799 — 1800	364	315	41	8	1— 9—
1800 — 1801	747	645	63	39	1—11†
1801 — 1802	1070	956	84	30	1—12†
1802 — 1803	601	539	53	9	1—11†
1803 — 1804	256	215	33	8	1— 7$\frac{1}{2}$
1804 — 1805	184	144	34	6	1— 5$\frac{1}{2}$
1805 — 1806	268	235	—	4	1— 9—
TOTAL.....	4453	4033	420		

Some additional cases of an affection of the lymphatic vessels are published, which prove the existence of this complaint, independent of pregnancy. The following paragraph is appended to the short chapter on Hooping-Cough.

"The beneficial effect of the limestone soil in Derbyshire has long been known to the old practitioners of this town, in the cure of hooping-cough; and I have had an opportunity of verifying it in some very striking instances. If the climate of the Peak were milder, I am persuaded that many cases of spasmodic asthma might be relieved by residence at Buxton. It is a well-known fact, that broken-winded horses are free from their complaint, while they remain there. This may be attributed in some degree to the quantity of lime which the brooks hold in solution; and in some measure to the impregnation of the atmosphere, from the numerous lime-kilns in the neighbourhood."

Some other additions which we have discovered on a comparison of the former volumes with the present, consist of a few remarks on the subordinate power of nitrous acid in syphilitic cases; some observations on the venereal disease, not very clear or convincing; and a note respecting the treatment of the Walcheren fever, in which the *liquor arsenicalis* is recommended.

IX.

An Essay on the Effects of the Carbonate of Iron, and other Preparations of Iron, upon Cancer: with an Inquiry into the Nature of that and of other Diseases to which it bears a relation. By RICHARD CARMICHAEL, Surgeon. Dublin, 1809. Gilbert and Hodges. Second edition, considerably enlarged and improved.

GREAT as the degree of scepticism may be, with which we open a book professing to hold out a remedy for cancer, yet the smallest prospect of being able to mitigate so terrible a disease, ought to lead medical men to inquire, with careful attention, into the merits of any class of medicines which may be said to effect its cure.

In our third volume, we took notice of a former edition of this work; and without entering into a minute discussion of the subject, we then gave it as our opinion, that the cases of what Mr C. called *cancer*, cured by the preparations of iron, were really not cancerous, but of a different nature. On perusing this edition of Mr Carmichael's work, the subject has created a new and lively interest; and we think it our duty again to make some strictures on his writings, and to expose, at more length, the errors into which we conceive he has himself fallen, and into which he also attempts to bring others.

There is much confusion in regard to cancer; not that cancerous sores are mistaken for those of a more mild nature, but sores which are *not* cancerous, having a malignant character, are often considered to be genuine cancer. This has been the foundation of the repute of a variety of remedies which are daily employed for the cure of cancer; and to the same cause must be assigned any favourable opinion which individuals might have been led to form of the medicine proposed by Mr Carmichael.—Such is indisputably the rock upon which Mr Carmichael has split. He has either, from a want of due discrimination, or from some reasons which we will hardly venture to suspect, had the boldness to present to the public, cases which, he says, were *cancerous*, cured by the different preparations of iron; and of these we hesitate not to assert, that there does not appear *one* of a true cancerous nature.

In taking a general view of this work, there is another circumstance which is to us equally striking. The author gives several

letters from his medical correspondents, in which they express their opinions of the effects of iron in the cure of cancer; and it is singular, that some of them state, in the most clear and decided manner, that they believe these preparations are useful in the treatment of some sores resembling cancer, but that they have found them perfectly inefficacious in curing ulcers of a truly cancerous nature.

But to proceed more minutely into the examination of the work. There are three sets of cases contained in it. The first consists of cases of *cancer* cured by the preparations of iron. The second, cases of cancer *relieved* by the same medicines. And the *third*, cases which were *neither* cured nor relieved.

The first of these (cases of cancer cured by the preparations of iron) more particularly deserve notice; and it is easy to show, that there is some leading circumstance in all of them, which unquestionably demonstrates their *non-cancerous* nature. Even the first case gives a strong proof of our assertion. The disease appeared in the upper lip, a part of the body which true cancer is well known rarely to attack, but where peculiar phagedenic sores are not unfrequently observed. And in giving the history of the case, he says, "She was ordered to take pills of the extract of cicuta and calomel; the sores were frequently sprinkled with the hydrargyrus nit. rub., *and under this treatment were healed in ten days!*" Is not this circumstance a sufficient proof that the sore was not cancerous? Is there in the annals of medicine any cases of cancer healed by such treatment?—In the second case given by Mr Carmichael, the disease is by no means described with the accuracy necessary to enable any person to say that it was cancer. That it was not cancer, is probable, both from its progress and situation.—It appeared in the form of a small tumor on the inner canthus of the upper eye-lid, which ulcerated in a *month* afterwards, and which ulceration *rapidly* extended along the inferior margin of the eye-lid to the external canthus. It is well known, that cancer, particularly when it appears in the skin, makes a slow progress, and that such ulcers acquire only a small extent after the lapse of many months, or even years. —In the third case, the age of the patient is a strong proof of the dissimilarity of the disease to cancer, it having appeared on the side of the nose of "a very young lady;" also a part of the body liable to phagedenic ulcers, and seldom known to be affected with cancer. In all the remaining cases, some circumstance may be pointed out, sufficient to show the want of our author's discrimination. The period of life in which the disease occurs, the part of the body affected, and even the appearance of the sore itself, seem never to be taken into consideration, most of the

cases having occurred in parts where cancer has been seldom remarked by others; and he contents himself with the belief, that all sores are cancerous which have any thing malignant in their aspect; and particularly, that no ulcer but a cancerous one ever occurs in the face.

With regard to those cases said to be *relieved* by the preparations of iron, we have little to observe: but in justice to our author, we ought to mention, that in some few cases, the preparations of iron seemed to alleviate some of the more distressing symptoms of the disease; and by their well known *tonic* power, they appeared to strengthen and improve the general health of the patient. The cases of cancer *not* relieved by iron require no comment.

That the opinion which we have now given of Mr Carmichael's work may appear to rest on the more firm ground, we shall bring forward the opinions which he himself has given, of other surgeons with whom he had corresponded on this subject; and it is difficult for us, in any satisfactory manner, to account for our author passing over in silence what had been so clearly and decidedly stated to him. In a letter from Dr Alley, we find the following paragraph:—

"It is doubted by some, if the cases in which the preparations of iron have been successful, were *truly cancerous*; and, perhaps, the one which I have endeavoured to relate may appear equally dubious. Of this I am satisfied, had any of the opposers of the efficacy of the preparations of iron in the treatment of cancer, been consulted upon the case, an opinion similar to mine would have been delivered; and I am happy that my prejudices are never so strong as to induce me to condemn, without trial, a remedy which has at least nothing to forbid its application." p. 95.

Mr Mahary says, "Not having taken notes of these cases, I can only say, generally, that I at present feel a strong conviction of the efficacy of iron in *bad ulcers*, which, I believe, would scarcely, if at all, yield to the hitherto usual treatment." p. 97. In a letter from Mr Du Gard, he says, "In that peculiar morbid affection of the face, however, which is *commonly* termed cancer, but which, in my opinion, is *a distinct disease* from cancer, I have had many cases, and, by the iron treatment, have happily succeeded in curing all of them." p. 85. I have tried," says Mr Allard, "the oxyphosphate of iron in several cancerous sores, both in private practice, and in the Bristol Infirmary; but the result has *not* been successful." p. 100. In a letter from Mr George Bell, he states, "I shall venture only to observe, as the general results of my experience of the use of iron in cancers, that the preparations of this metal seem to me to be better calculated for

those cases of superficial cuticular ulceration which very much *resemble* cancer, which are generally treated as cancerous, and are often removed by the knife; for example, those which we frequently meet with on the *alæ nasi*, the eyelids, the forehead, and even the lips, than for those cases of cancerous ulceration of the mamma or testes, which are accompanied by a deep-seated induration of a glandular part." p. 216.

From opinions so distinctly given by different medical men, it is difficult to conceive how their sentiments should not have even merited the notice of Mr Carmichael. In corresponding with a man who is warped to particular opinions, it is, no doubt, a delicate task to expose, by strong expressions, any favourite practice, and to point out his errors; yet the quotations we have made, are quite sufficient to evince the opinions of Mr Carmichael's correspondents.

The other parts of the volume before us, contain remarks on various subjects connected with cancer; but we will not encroach on our readers' time, by attempting to make any extracts. Before, however, taking farewell of Mr Carmichael, we may observe, that, notwithstanding the vain attempt which he appears to us to have made, to recommend to the public a remedy for cancer; yet similar inquiries are not without their good: they may expose the individual to severe censure and reproach, but they lead others to inquire with greater attention into the symptoms and histories of those diseases which resemble cancer, and with which cancer is so liable to be confounded. On the other hand, the *title-pages* of such books are cruel and pernicious; they delude many unhappy sufferers; and by inducing them to try a useless remedy, they allow that moment to slip away, when there was one, though a severe cure, for their disease. In this point of view, we severely condemn works such as that now before us, as they tend to stagger the belief and confidence of the public in their opinion of the truly well-informed and judicious, and lead the ignorant to believe in the existence of a mild and efficacious remedy for a disease which, as far as we yet know, admits of none but the knife.

PART III.

MEDICAL INTELLIGENCE.

Report of Diseases treated at the PUBLIC DISPENSARY, *(near Carey-Street), London, from Nov. 30th 1810 to Feb. 28th 1811.*

Acute Diseases.

	No. of Cases.		No. of Cases.
Tertiana	1	Catarrhus	124
Febris	16	Rheumatismus acutus	11
Ophthalmia	1	Arthritis rheumatica	1
Pleuritis	1	Scarlatina anginosa	2
Peripneumonia	14	Herpes zoster	1
——— notha	1	Erysipelas faciei	1
Pertussis	7	Epistaxis	2
Hepatitis	1	Hydrocephalus	2
Peritonitis	3	Febris infantum	6
Dysenteria	11	Abortus	4

Chronic Diseases.

	No. of Cases.		No. of Cases.
Cynanche chronica	3	Hepatalgia	2
Cephalæa	23	Hæmorrhagia intestin.	2
Vertigo	1	Hæmorrhois	5
Hemicrania	1	Scirrhus intest. rect.	2
Amaurosis	1	Marasmus	8
Asthma et Dyspnœa	3	Tænia	2
Catarrhus chronicus	67	Ascarides	2
Hæmoptysis	11	Nephralgia	12
Phthisis	16	Dysuria	3
Palpitatio	3	Enuresis nocturna	1
Pleurodyne	5	Hysteralgia	4
Dyspepsia	15	Leucorrhœa	12
Gastrodynia	20	Amenorrhœa	7
Pyrosis	3	Dysmenorrhœa	2
Hæmatemesis	1	Menorrhagia	5
Vomitus	3	Prolapsus uteri	4
Icterus	2	Hysteria	3
Enterodynia	5	Chorea	1
Diarrhœa	15	Epilepsia	3
Constipatio	2	Hemiplegia	2
Colica Pictonum	1	Paralysis manûs	1

Chronic Diseases continued.

	No. of Cases.		No. of Cases.
Asthenia	18	Ascites	1
Rheumat. chronicus	26	Hydrops. tot. corporis	6
Lumbago et Sciatica	2	Impetigo	3
Melancholia	1	Psoriasis	4
Scrofula	1	Porrigo	5
Hydrothorax	1	Scabies	8
Anasarca	4	Lepra	1

The winter has been variable, but, on the whole, moderate in point of temperature. The month of December was exceedingly moist, some rain having fallen on a great majority of days. On the 27th, a frost set in, which continued during a fortnight with considerable severity, the thermometer frequently standing at 19° in the morning, and the degree of cold, as affecting the animal temperature, being considerably augmented on several days by a strong north-east wind. During the remainder of January, the weather was damp and muggy, with occasional slight frost, and one heavy fall of snow in the night of the 30th, which totally disappeared on the following day. With the exception of the third week, in which the mornings and nights were frosty, February has been very mild and showery. The winds have been unusually high during the winter, and the fogs less frequent than is common.

The course of the weather has thus been, on the whole, very similar to that of the last winter, but somewhat less severe, and accompanied with a clearer atmosphere; and the list of diseases above stated corresponds very nearly with that which we gave for the same period last year; the number of instances of chronic cough and of peripneumonia notha being in the present list somewhat less numerous. The total number of medical patients has been 534, during the three months comprehended by the report, of which 237 were pulmonary complaints, and a large proportion occurred since the beginning of January.* Probably the unusual absence of fogs, especially during the frosty weather, may account for the smaller number of the two forms of pectoral disease just mentioned. The acute catarrhs, however, have been generally severe, accompanied with a considerable degree of general fever, and prostration of strength; but they have com-

* See the Report of last year, in No. XXII. of this Journal, for April 1. 1810.

monly been short in their duration, and the convalescence has been speedy, especially in the young and strong, many of whom have been thus attacked. The bowel complaints, which have been rather numerous, have not proved very severe or tedious in general. Only two cases of dysentery were accompanied by a discharge of blood. Contagious febrile diseases have been almost unknown in our district during the last three months; so that, although we have had occasion to see a good deal of indisposition, during this period, we have witnessed but a small proportion of mortality.

Under the head of Febris we have classed the few anomalous and slight cases of continued fever that have occurred. These have never shown any tendency to the typhoid form, and have not spread beyond the individuals in whom they originated. In some instances the bowels appear to have been the only seat of local irritation, the head remaining free from disorder, except a little pain in the forehead and temples; and the symptoms have disappeared in a few days, by the use of purgatives, diaphoretics, and abstinence. In others, the principal symptoms have been languor, lassitude, and total loss of appetite, or rather a loathing of food, with a quick pulse, dry tongue and skin, and loss of sleep, the patients not being altogether confined to bed, nor complaining of much actual suffering. In such cases, it has appeared that little active treatment can be pursued with advantage; the disease must be led, rather than driven. Both stimulants, on the one hand, and evacuations, on the other, appear rather to disturb, than to accelerate the progress to recovery, which time certainly brings about. The moderate use of diluent drinks, and of liquid vegetable nutriment, with the mildest saline laxatives and diaphoretics, absolute quietness of mind and body, and a medium temperature of the apartment, rather verging to the warm than the cold, appears to be the most useful treatment in these cases; at least after the fever is established, which is commonly the case when we are first called in.

Both the patients affected with tape-worm took the oil of turpentine, in the dose of an ounce and half; and in both it was followed by a discharge of a very considerable length of the worm. One of the patients had been relieved by the same remedy, at the Dispensary, in the month of November last, and had since that time remained tolerably free from uneasiness; yet she now passed a tænia of several feet in length, on repeating the turpentine, to which she was led in consequence of some joints of the worm having lately begun to pass from the anus while she was going about. The thready head of the animal, however, has not yet appeared.

The palsy of the hand occurred in a compositor, employed in a printing office, who had had three or four similar attacks be-

fore. This affection, in which the hand drops, as in the case the palsy from lead, succeeding to colica pictonum, appears to arise from handling the types, and is not very uncommon in persons employed as compositors. It is supposed, however, to arise principally from handling the metallic types when *hot*; and is said chiefly to affect those who, after washing their types, handle them while drying before the fire. This attack was preceded by constipation and colic, with great depression of strength and spirits. The Bath waters afford the most effectual cure of these local palsies; as in the cases affecting painters, glass-polishers, &c.

The case of shingles (herpes zoster) was characterized by a broad belt of clusters of vesicular eruptions, which extended more than half round the waist, and was accompanied by slight feverishness, and a considerable deep-seated pain in the abdomen. As is usual, the disorder began and terminated its course in *fourteen* days, going through its changes of vesicle, pustule, and scab, with its accustomed regularity. * Dr Cullen very justly questions the propriety of his arrangement, when he places this disease among the species of Erysipelas. † It is very distinct both from that and every other eruptive disease, in the appearance, form, and duration of the eruption; inasmuch as it consists of minute, clustered *vesicles*, transparent in the first instance, and each cluster surrounded with a narrow red margin; these clusters become more or less confluent; the matter in the vesicles becomes, in two or three days, opaque, but not exactly a yellow pus; and then it dries into a little brown scab, which falls, or is rubbed off about the fourteenth day. This eruptive complaint is not uncommon in London; since, from the commencement of these reports, I have seen about twenty-three cases. But herpes is occasionally seen in other forms, besides this of the *zoster* or *zona* above described; that is, an eruption beginning with small *clustered vesicles*, upon a red and itching base; soon becoming opaque, or pustular, and terminating in fourteen days, occurs in various forms; and to such an eruption alone is the term *herpes* confined in the nomenclature of Dr Willan. It is sometimes confined to a single patch or cluster (always disposed to assume the circular or oval figure), and sometimes several appear; if on the limbs, they spread longitudinally, and not round them, as on the trunk of the body. I have seen herpes, in several instances, on the prepuce; in which case the vesicles are very minute, five

* See the history of this affection in the Report, July 1805, Vol. I. p. 389 of this Journal.

† See his Nosol. Method. Gen. XXI. Sp. 2. *Note.*

or six in number in each cluster, if there be more than one. In this instance, the progress very much resembles that of beginning chancre, as described by authors; and I once knew mercury employed, and escharotics applied under that impression. This *herpes præputialis*, if left to itself, that is, if no ointments or stimulants are applied, and the matter be simply absorbed by dry lint (when the little sores are exposed by the rubbing off of the tops of the pustules), invariably terminates in a fortnight; but the ulcerations may be much extended, both in extent and duration, by active interference; although nothing, I believe, will shorten their natural period.

It is to be regretted, that this word *herpes* has been so much misapplied and abused; so that, like *scurvy*, and some other terms, it is often used as synonymous with *cutaneous* eruption. The little ulcers, by which it is considered as characterized by many writers, are, in fact, the secondary appearances, after the vesicles have changed their form; * and it is scarcely to be doubted, that these ulcerations have been often actually produced, and rendered inveterate, by the busy hand of art; when we find Turner and others "clipping off the heads" of the vesicles, for the sake of *preventing erosion*, and of applying *ung. diapompholygos*, &c.; † and from what we have seen in the use of the red oxide of mercury in one case of the præputial herpes. The vesicle often becomes opake in two days; and mistakes have doubtless arisen from the late period at which medical men are applied to. I know of no writer who has mentioned this herpes of the prepuce, except one, in a number of the Med. and Phys. Journal, I believe, for May or June 1810, who has given a plate very ill representing its form. The author of an able essay on herpes, in the second volume of the Edinburgh Medical and Surgical Journal, p. 325, appears to have erred, in not sufficiently discriminating between papulæ, pustula, and vesicula.

Feb. 28. T. B.

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* Cullen, *loc. cit.* Gen. CXLVII. *Herpes*, defined "Phlyctænæ *vel* ulcuscula plurima, gregaria, serpentia, dyspulotæ."

† Turner on Diseases of the Skin, Chap. V. See also Russell, de Tabe Glandulari, where a still harsher practice was employed.

On the Treatment of Diarrhœa and Dysentery.

The following is extracted from a private letter, dated Lisbon, 9th November 1810, from Mr James M'Leod, Hospital-Mate, to his brother Mr George M'Leod, surgeon, Glasgow. As it seems to throw some additional light on the nature and treatment of diseases, which, in many instances, have baffled most of the means hitherto employed, we feel pleasure in laying it before the public.

"In my last letter, I mentioned the mode of practice followed in this hospital in respect to dysentery. You perhaps thought me too warm in favour of that plan; but six weeks more experience fully justified what I then stated. From the following monthly return, you may judge of our success. From the 20th September to the 20th October, we dismissed 604 patients: there were eleven deaths, viz. three within a few hours after admission, five men, two women, and one child. The diseases were as follows:—400 dysentery and diarrhœa, chiefly of the former; 200 fevers; 150 intermittents; and 34 rheumatism, ophthalmia, and venereal.

"If we get the patients direct from the army, they are cured on an average of from four to six days; for we find, that the stronger the patient is, the cure in proportion will be quick; we are obliged to bleed twice, and sometimes thrice a-day, during the two first days, before the inflammatory symptoms are abated. I have seen a patient lose 100 ounces of blood before the bloody fæces were stopped; and during all that time, he looked better every day, (as Dr Watt mentions in his diabetic cases, or in those that I saw in the Glasgow Infirmary.) This plan of cure goes completely against the old school; for, on looking over your notes of G——'s Lectures, I find that he says,—"bleeding is never to be put in practice, as debility so soon ensues after the first attack." Now, by experience I find, that a patient is more debilitated from losing two ounces by the anus, than by taking twelve ounces from the arm, which is our general allowance at each bleeding; and so far from becoming weaker, he will tell you, that he is better since letting blood; and that the griping pains, with the tenesmus, are gone; his countenance, which was full of anxiety, is changed to serenity. If any headach, redness of the eyes, or pain of the bowels remain, v. s. is again repeated, with three doses of pulv. ipecac., each containing seven grains, one to be taken every three hours, with plenty of hot drink. If the

purging has been suddenly stopped, we give a few grains of calomel, and twelve grains of rhubarb which generally carries off the scybalæ. Afterwards, we give the Mist. Arab. with sixty drops of the tincture of opium to every pound of it. This quantity is to be taken every twenty-four hours. We support the patient with good soups, and the best wine. The cases of diarrhœa are treated just in the same way; only we seldom bleed, unless the patient be plethoric. With respect to old cases of dysentery, the same practice answers; only it must be used with more caution."

Remarks by Dr Robert Watt *of Glasgow, who transmitted the preceding Extract.*

The practice of blood-letting in dysentery was very common among the ancients; and if their accounts be accurate, its effects were as decisive, as its employment was general. Galen, Ælius, and Trallian, speak of bleeding as the chief source of giving relief, especially in the beginning and height of the complaint. Riverius mentions venesection as a common practice in his time, and gives cases where it was employed with success. Amatus, the Portugueze, describes the case of a patient, who was bled freely on the thirtieth day of the disease. "Mark," says he, "the surprising event,—immediately the blood ceased, but the looseness continued." † Heister observes, "that those who are full of blood, and affected with great heat, and in whom an inflammation of the bowels was to be feared, I bled in the beginning, which gave them great relief; and, by using the afore-mentioned remedies, they were the more centainly preserved." ‡

But one of the most pointed remarks with regard to bleeding in the cure of dysentery, is contained in the following passage, in a letter addressed by Dr Whyte to the Duke of York, dated Torbay, 10th August 1799. "If purging and tormina still continue; or if the patient have headach, or any other symptom of general fever, no time must be lost in recurring to the lancet; and we must not be deterred by the low state of the pulse. It is the removal of pain and purging that is required; and from successful experience in some hundred cases, I say confidently, that by such means we may always succeed. I have frequently ta-

† Cockburn on Fluxes, p. 305.

‡ Heister's Obs. p. 109.

ken from forty to fifty, and sixty ounces of blood, in a couple of hours; and in so doing, saved many valuable lives. *

According to these observations of Dr Whyte, the low state of the pulse ought to form no objection to the use of the lancet. Dr Donald Munro appears to have entertained a similar sentiment. "Nor were we discouraged," says he, "from bleeding in the beginning by the low quick pulse, which often attended this disorder; and we frequently found the pulse rise as the blood flowed from the vein." †

Glasgow, 6th February, 1811.

Extract of a Letter from Dr Watt.

I have now to add, that in perusing Botallus's Treatise, "De curatione per missionem sanguinis," I have found a very ample display of the practice, illustrated by numerous cases. ‡ I find the subject also treated at considerable length in a work by Dr White, entitled, "De recta missione sanguinis," published in 1721. The practice indeed appears to have been very common among the ancients.

I have made these and the former remarks, not by any means to detract from the merit of those who have so happily adopted the treatment on this occasion; but rather to encourage others to imitate their example, by showing them that the plan has the experience of ages in its favour, and the support of some of the brightest ornaments of science.

Glasgow, 9th February, 1811.

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* Medical and Physical Journal, Vol. II. The Dr Whyte here alluded to, had resided some time at Constantinople, and had visited different parts of the Mediterranean before Sir Ralph Abercrombie's expedition to Egypt. In order to prosecute his medical investigations, he came into the service of the army as hospital-mate. He was for some time attached to a corps of Maltese pioneers. He first employed the depleting plan on himself, on finding other means fail. The quantity taken was very great, but the result was an instantaneous and complete cure. He afterwards extended the practice to others with the same beneficial consequences. He granted, however, that, in mild cases, a cure might be accomplished by gentler measures, particularly by flannel bandages.

Dr Whyte died at Alexandria, by inoculating himself for the plague, which he had done twice before with impunity, with a view to prove that the disease was not infectious.

† On the Diseases of the Army.

‡ Botallus was physician to the French embassy at the court of Queen Elisabeth.

Extract from a Letter on the Use of Tincture of Muriat of Iron in Gleet.

Mr Cline (as is well known) long ago pointed out the great benefit which results from the use of the "Tinctura Muriatis ferri" in spasmodic stricture of the urethra. Some time ago my attention was particularly attracted to this medicine, by a case of hysteria, of which ischuria renalis seemed to be a very prominent symptom. The effects were so strongly marked, that I thought the subject worthy of being prosecuted still further. I have not, indeed, had any opportunity of repeating the experiment in any cases of pure ischuria; but I have had occasion to use it in spasmodic stricture of the urethra, accompanied by some symptoms of ischuria, and have found it uniformly successful in relieving both.—In the course of my use of it in spasmodic stricture, I have had strong reasons for believing, that it is a very powerful remedy in the gleet, which so usually succeeds gonorrhœa. I have seen only two cases in which it was employed; but in both, it was decidedly useful. When persisted in, the discharge ceased; when intermitted, though for a very short time, before the entire cessation of the gleet, the disease became as virulent as before; but when steadily employed, the benefit was permanent.—The dose which I have employed, was from 40 to 60 drops thrice a-day.

The particulars of the cases it is unnecessary to state. My object will be sufficiently attained, if, by this communication, my brethren in extensive practice should be induced to give a fair trial to a remedy which appears to me so simple, and at the same time so very efficacious.

Observations on the Treatment of Ophthalmia, by Salivation, and a Case of diseased Rectum, successfully treated. Communicated to Dr Watt by Mr James Muir, Surgeon, Paisley, Member of the Faculty of Physicians and Surgeons, Glasgow.

As inflammation of the eyes is one of those diseases in which the usual antiphlogistic means sometimes fail to afford relief, and as few patients in private practice can well bear, or indeed would readily submit to those copious bleedings so successfully employed in the army, I have been induced to adopt a mode of treatment,

which, though not new,* deserves, in my opinion, to be more generally followed. I offer it to your consideration with the greater confidence, that notwithstanding the extraordinary share of attention which professional men have paid to this disease, since the memorable expedition to Egypt, its ravages are still to be deplored, not only as producing great and permanent distress to individuals, but as a national evil. The purulent ophthalmy in adults has never come under my observation, so that I cannot judge how far the practice may be admissible in this form of the disease, but as some of your pupils may hereafter enter into the public service, if you think the following case can supply them with any hints for mitigating the severity of this disorder, you are at liberty to make what use of it you please.

In the summer of 1808, when the acute ophthalmy prevailed in this place in a severe and obstinate form, the son of D. M'J——, aged 17, was seized with the disease in his right eye. Before I saw him, the cornea had burst, and he had seen none with it for three weeks; the inflammation had attacked the left eye, and, in a few days, he was completely blind. He was bled at the arm, and the eyelids were scarified repeatedly; the head was blistered, and he was frequently purged without relief. Reflecting on the advantages which I had frequently seen derived in other inflammatory disorders from mercurial salivation, I determined to have recourse to it in this instance, as the only chance which seemed to remain of preserving the sight of the left eye, and abating the patient's sufferings. I accordingly put him upon a course of calomel and opium; and had the satisfaction to find, that as the mouth became affected, the inflammation subsided, and vision was restored. There is now staphyloma of the right eye, only a small part at the edge of the cornea on one side remaining transparent; the iris of the left eye is drawn a little towards the inner canthus, giving the pupil an oblong shape, but vision is complete, and the patient has since followed his occupation of a weaver without interruption.

Since that period I have employed salivation in many other cases of ophthalmy with the same happy effects; the pain and inflammation always receding, as the salivary glands became affected, and the sight becoming as strong as formerly. The temporary inconvenience from the mercurial disorder, is compensated, not only by the cure of this tedious and dangerous disease, but in many, by a better state of health than they for some time enjoyed.

Allow me to subjoin the case of diseased rectum, of which I spoke to you when lately in this place.

* See Riverius.

15th October, 1810.—J. W. sen. aged 59, has been subject to piles for 16 years, which, about four years ago, distressed him much within the gut. After continuing for a year and a half in this situation, he enjoyed a pretty perfect remission for about three quarters of a year, when they returned in the same manner. Six months ago he began to be affected with excruciating pain at the anus; on going to stool matter was observed to ooze from it in small quantities; and, for ten weeks, he has never been able to procure any evacuation without purgatives or clysters. He can bear nobody to introduce the clyster-pipe but himself; the feces are as small as a worm, and indented along the surface; the exertion is succeeded by great heat and pain at the anus, for which he employs fomentations. He has frequently pain and difficulty in making urine, which is deficient in quantity. The penis is shrunk even when he has erections, which are feeble; he has lost his appetite, and he does not perspire.

℞ Ung. Acet. Cupri. ʒiss.
——hydrarg. fort.
——— Nitrat. mit. ā ʒvi. M.

November 12th.—With great difficulty and pain, he got a little of the ointment introduced into the gut three or four times a-day. After using it three days, the gut began to widen, and in eight or ten days, he says, he never felt in his life more satisfaction than when, instead of being scarcely able to introduce the smallest clyster-pipe, he could introduce two fingers. The bowels are natural; the dysury has left him; the penis has resumed its natural size, and wonted vigorous erections. For ten days he has used a few mercurial pills, which gently affected his mouth.

February 6th, 1811.—He has continued free from complaints in these parts.

Paisley, 7th February, 1811.

MEDICAL REPORT OF GLASGOW INFIRMARY for 1810.

List of Patients admitted and discharged,

From 1st January, 1810, to 1st January, 1811.

Patients remaining in the house, 31st December 1809,	100
Admitted since,	957
In all,	1057

Medical,	656	1057	Men,	633	1057
Surgical,	401		Women,	424	
Cured,				617	
Relieved,				199	
Desire,				63	
Dead,				52	
Advice,				32	
Irregular,				15	
Improper,				18	
				933	
Remaining 31st December 1810,				121	
				1057	

List of Diseases treated in the Infirmary of Glasgow in 1810.

Abscess, common, cases of	8	Fever, intermittent	8
——— lumbar	10	——— nervous	1
Amaurosis	3	——— putrid	5
Aneurism	1	——— simple continued	76
Apoplexy	1	Fistula in ano	3
Asthma	7	——— in perinæo	2
Bleeding from lungs	6	Fracture, simple	12
——— stomach	1	——— compound	8
Bruise	8	Fungus hæmatodes	3
Burn	13	Gangrene	1
Cancer	8	Hare-lip	1
Carious bone	10	Headach	14
Cataract	1	Heart, organic diseases of	3
Catarrh	4	Hydrocele	9
Chlorosis	1	Hypochondriasis	2
Cholera morbus	1	Hysteria	12
Colic, lead	2	Jaundice	2
Compression of brain	3	Inflammation of eyes	23
Concussion of brain	11	——— brain	1
Consumption	47	——— intestines	2
Curved spine	8	——— kidney	1
Debility	2	——— liver	13
Diabetes mellitus	8	——— lungs	60
Diarrhœa	2	——— throat	8
Dislocation	2	Joints, diseased	39
Dropsy	39	Lock-jaw	1
Dysentery	5	Lues venerea	72
Dyspepsia	35	Mamma, diseased	7
Dysuria	3	Mania	1
Enuresis	1	Mensium suppressio	3
Epilepsy	8	Palsy	12
Erysipelas	11	Paraphymosis	1

Phagedena	1	Sprain	3
Polypus of the nose	2	Stone	3
——— uterus	1	Stricture of urethra	2
Prostate, diseased	3	Testis tumidus	7
Rectum, diseased	2	Tussis senilis	6
Rheumatism	56	Tumour	9
Rupture	2	Ulcer	80
St Vitus's dance	2	Varicose veins	5
Scald-head	6	Wound	11
Sibbens	18	Worms	1
Simulatio	2	Water in the head	2
Skin, diseases of	25		
Small-pox	2	In all	936
Spleen, diseased	1		

List of Operations.

Amputation	11	Fistula in ano	1
Couching	1	Hare-lip	1
Cutting for stone in bladder	3	Tapping for hydrocele	6
Extirpation of cancerous breast	3		
——— lip	3	In all	30
——— tumours	1		

Mortality Bill for the City of Glasgow and Suburbs. 1810.

IN THE CITY.

	Male.	Fem.	Tot.
January,	49	60	109
February,	50	58	108
March,	44	54	98
April,	42	56	98
May,	51	49	100
June,	42	35	77
July,	35	54	89
August,	36	49	85
September,	43	38	81
October,	51	38	89
November,	39	43	82
December,	45	60	105
Total,	527	594	1121

Under 2 years	-	330
Between 2 and 5	-	110
5 — 10	-	61
10 — 20	-	59
20 — 30	-	56
30 — 40	-	84
40 — 50	-	73
50 — 60	-	92
60 — 70	-	128
70 — 80	-	89
80 — 90	-	26
90 — 100	-	3
Total	-	1121

Total in city and suburbs, 1810	-	2367
Total in ditto ditto 1809	-	2368
Decreased	-	1

The list of diseases is so indiscriminate as hardly to deserve notice. The following are some of the most remarkable items in the list for the city: Consumption, 240, aged 232; stopping, 100; chincough, 94; fever, 81; bowel hive, 79; still-born, 70; measles, 51; teething, 28; water in the head, 27; asthma, 26; small-pox, 23.—The circumstance of there being only one of difference between the sum of the deaths in the two years is remarkable.

RAIN in 1810.

1. *At Dalkeith.* 2. *Bothwell Castle.* 3. *Glasgow.* 4. *Largs.*

	First.	Second.	Third.	Fourth.
January,	2.280	1.770	1.743	3.740
February,	0.984	1.455	1.283	3.191
March,	2.843	2.467	1.687	4.051
April,	1.584	0.768	0.659	3.179
May,	1.435	0.707	0.510	0.732
June,	1.479	1.962	1.145	1.781
July,	3.134	3.640	3.724	3.100
August,	3.100	2.410	2.874	3.244
September,	0.457	0.620	0.724	1.804
October,	1.570	1.807	1.176	2.399
November,	4.430	3.334	3.374	4.859
December,	2.340	4.070	2.534	6.643
Total,	25.636	25.010	21.433	38.714
Do. in 1809,	28.552	24.440	25.132	40.624

Remarks.—From this Table, it appears that the rain in some parts of the west coast of Scotland is nearly double that in the more inland parts of the country. Can this change have any particular influence on the health of the inhabitants? Are there any diseases peculiar to those situations? Is croup more frequent than in other situations? Dr Cheyne remarks, that croup "chiefly appears in the winter and spring, in low situations, exposed to air which has passed over large bodies of water, and is most especially the disease of sea-port towns." Is it frequent in Greenock, a sea-port town, where more rain falls than in almost any other place in Scotland? It appears, from the bill of mortality for the city of Glasgow last year, that 100 have died of *stopping*. Were these all genuine cases of croup; or are there other diseases to which that term is applied? We can hardly suppose that every eleventh death could be a real case of cynanche trachealis, as that disease is now defined and understood; or, if it

was, does the number of deaths, from that cause, bear a similar proportion in the bills of mortality for other towns? W.

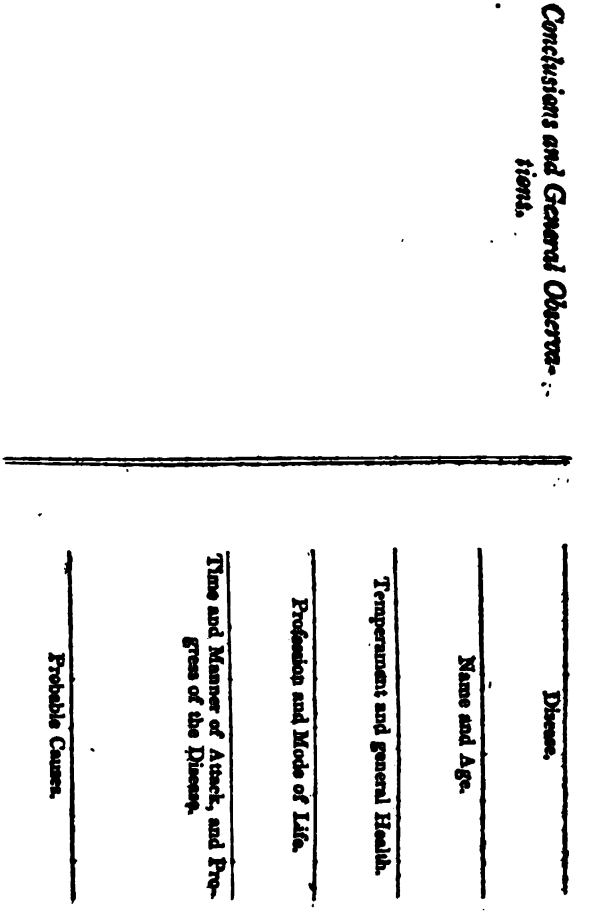
Vaccination in Glasgow.

The following statement contains perhaps one of the most decisive proofs of the utility of vaccination which has been submitted to the public. The first column contains the year. The second the number who have died of the small-pox in the city. The third the whole number of deaths in the city. The fourth the number of deaths in the city and suburbs.

First.	Second.	Third.	Fourth.
1792	408	1508	1912
1793	134	1356	2190
1794	278	1365	2445
1795	132	987	1700
1796	265	1327	2297
1797	134	961	1813
1798	231	1125	2064
1799	179	1025	2181
1800	224	1279	2499
1801	159	985	2096
1802	107	825	1928
1803	91	1158	2438
1804	123	1011	2224
1805	21	968	2389
1806	15	939	2280
1807	48	1102	2463
1808	14	1446	3265
1809	54	——	2968
1810	23	1121	2367

There are perhaps few towns of the same magnitude, where the beneficial effects of vaccination have been more distinctly experienced. None of those jarring opinions, which have disgraced other parts of the kingdom, are known in Glasgow. The profession universally recommend the practice, and the people almost as universally receive it. The few deaths by small-pox which have occurred, within these last six years, have been exclusively among recent incomers, and the poorest and most wretched of the Highlanders and Irish. It appears from the records of the Vaccine Institution, that, previous to January 1811, upwards of *fourteen thousand five hundred* had been inoculated *gratis*. W.

Glasgow, 1st February, 1811.



This schedule for facilitating an arranged record of medical observations appears to be so well adapted to the purpose for which it is intended, that we think its general adoption would be attended with important consequences. It may be printed on a larger or smaller sheet, according to the hand-writing of the person for whose use it is designed; but, in general, the size of a foolscap folio, or post quarto, will be found most convenient.

Day of the Month and Disease.	External Symptoms; especially the State of the Skin, as to Temperature, Colour, and Moisture.	State of the Nervous System; comprising Sleep, Strength, and the State of Mind, its Ideas, Sensations, and other Affections.	State of the Thoracic Viscera, and of the functions connected with them; as circulation, respiration, &c.	State of the Abdominal Viscera, Fauces, Œsophagus, Stomach, &c. with their Secretions and Functions.	Miscellaneous Observations.	Prescriptions.

Letter from the National Vaccine Board to the Governors of the Finsbury Dispensary, London, on the bad effects of the practice of inoculating for the Small-Pox at that Charity.

Leicester Square, Oct. 25, 1810.

SIR,—As the Finſbury Diſpenſary was inſtituted from the pureſt motives of charity and benevolence, it is conceived, that you and the other governors will approve of a communication, intimating, that the practice of the diſpenſary in one point is producing effects the reverſe of your intention.

It is ſcarcely requiſite to inform you that Parliament, after fully examining into the merits of the diſcovery of vaccination, were convinced of the important benefits that would reſult from its general adoption; and Parliament, in conſequence, have authoriſed Government to form a National Vaccine Eſtabliſhment, in order to extend vaccination to all parts of the empire.

This eſtabliſhment is placed under the controul of the preſident and cenſors, and the maſter and governors of the royal colleges of phyſicians and ſurgeons of London; who, from experience, and authentic information, are fully perſuaded of the wiſdom of the practice of vaccination, and of the futility of thoſe objections which have been urged againſt it. They obſerve, however, with regret, that although vaccination has ſpread not only through the Britiſh empire, but alſo among foreign nations, with the moſt beneficial conſequences, yet from prejudices artfully kept up, ſmall-pox inoculation is ſtill prevalent among the poor of this metropolis.

About two years ago, the governors of the ſmall-pox hoſpital took this buſineſs into conſideration; and, from a conviction of the great mortality which was cauſed by propagating a contagious and fatal diſeaſe, they prohibited their medical officers from inoculating the ſmall-pox, or diſtributing ſmall-pox matter.

A decreaſe of deaths from the ſmall-pox was the immediate conſequence: but unhappily this fatal malady again rages through the town, and deſtroys, within the bills of mortality alone, about thirty perſons every week.

Upon inveſtigating the ſources of this direful peſtilence, I have learnt, that beſides the pernicious activity of certain private practitioners, the inoculation of ſmall-pox is extenſively carried on at the Finſbury diſpenſary: above a thouſand perſons having been inoculated there laſt year, and matter having been diſtributed for the inoculation of others to an unknown extent.

You are earneſtly requeſted to reflect upon the conſequences of thus diffuſing among the crowded lanes, courts, and alleys of this populous city, a baneful infection, which proves fatal to multitudes, and ſtrikes many with total blindneſs.

Theſe indiſputable facts made an irreſiſtible impreſſion upon the minds of the governors of the ſmall-pox hoſpital; and as they knew that the inoculation of the ſmall-pox was diſapproved of by the moſt eminent of the medical profeſſion, they were little affected by the miſrepreſentations of the prejudiced, or by the ſophiſtry of a few who are intereſted in the propagation of ſmall-pox.

It is to be presumed, that when the governors of the Finsbury dispensary deliberate upon this subject, they will decide with equal prudence and humanity. For they are at present, though no doubt unintentionally, opposing a most benevolent measure of Parliament, and sanctioning a practice most fatally injurious to the community.—I have the honour to be, &c.

JAMES MOORE, Director.

Report of the Surgeons of the Vaccine Institution of Edinburgh, 1810.

In reporting to the Managers of the Vaccine Institution the state of vaccination for 1810, the Surgeons have the satisfaction to mention, that nothing has occurred which can in any degree diminish their belief of the perfect efficacy of the cow-pox as a preventive of the small pox.

Since last report, 583 have been vaccinated, making in all 11,108, from the commencement of the practice at the Institution.

The Surgeons have, since last report, inoculated with the small-pox a great many children, who had been vaccinated eight, nine, and ten years ago—all of whom have been found to resist the infection.

In no instance have they seen any bad effects which could be attributed to vaccination; and, upon the whole, the experience of another year serves to confirm them in their former opinion, that the practice of vaccination is deserving of the highest degree of confidence from the public.

Signed by WM. FARQUHARSON.
JAMES BRYCE.
ALEXR. GILLESPIE.
Edinburgh, Jan. 21st 1811. JOHN ABERCROMBIE.

Letter on Vaccination in Ceylon, from Thomas Christie, Esq. Med. Sup. Gen. to the Editor of the Ceylon Government Gazette.

Sir,—I beg leave to subjoin, for more general information, an abstract of the number of patients vaccinated in the different districts on Ceylon, during 1809, amounting to 25,697, which, added to 103,035, the number vaccinated in former years, makes a total of 128,732 persons who have been officially reported to me, by the respective superintendents and vaccinators, as having regularly passed through the vaccine disease, since its first introduction into this island in 1802, besides a few others inoculated by individuals, not belonging to the vaccination establishment.

Agreeable to the best information I have been able to obtain, the small-pox has not existed in any part of this island since February 1808, till October last, when the disease was brought to Jaffnapatnam by a country boat from Quilon on the Malabar coast. The contagion spread to a few individuals who had not been vaccinated in the Pettah of Jaffnapatnam, and, by means of a civil prisoner, was introduced into the jail at that place; but its progress there was immediately arrested, by the removal of the infected persons, and the indiscriminate vaccination of all the other prisoners.

By a late report from Mr Stutzer, superintendent of vaccination at Jaffnapatnam, it appears that there were only six individuals ill of the small-pox in that district; and it has found its way to no other part of

the island, except Putlam, where a coolie from Jaffna was taken ill with small-pox in December last, but has since recovered, without communicating the disorder to any other person.

The vaccine disease has now been so extensively diffused throughout this island, that while the inoculations continue so numerous as at present, we can have no reason to apprehend that the contagion of small-pox will ever spread epidemically in any part of the British possessions on Ceylon; and its occasional appearance here has the good effect of proving the preservative efficacy of the vaccine, and of rousing the natives from their apathy on the subject, as exemplified at Jaffnapatnam, where 1830 people have been inoculated during the two last months, and amongst them several Bramins, men and women, who had hitherto declined submitting to the operation.

I shall only add, that with a view of proving the permanency of the preservative efficacy of cow-pox, and the continuance of the purity of the virus on this island, Mr Stutzer has, at my request, in November and December last, inoculated with small-pox matter, several patients who had passed through the vaccine disease in 1804, and in 1809, all of whom have resisted the contagion.—I have the honour to be, &c.

Colombo, 24th January, 1810.

Professor Boyer is preparing an extensive work on Surgery.

M. Deschamp is preparing for the press a work on Aneurism.

M. Pelletan, surgeon of the Hospice d'Humanité at Paris, has in the press two volumes of Clinical Cases and Observations, illustrated by numerous engravings.

Sir George Alley, M. D. of Fermoy, Ireland, is arranging for the press a work to be entitled, "Reports of the Utility and Employment of Mercury in the treatment of Inflammatory and other Diseases, in which the exhibition of that remedy has been neglected, or considered as inadmissible." As this publication will necessarily embrace many important medical subjects, the author earnestly solicits the assistance of the respectable practitioners, civil and military, of Great Britain and Ireland, and will be happy to acknowledge any communications with which he may be favoured.

Dr Watt of Glasgow will commence his summer course of Lectures on the Theory and Practice of Medicine, on Tuesday, the 7th May, at ten o'clock, forenoon. By lecturing every day Dr W. will comprise nearly the whole in three months, *the time of the Botanical course.*

Dr Hosack of New York has begun to publish a periodical work, to be entitled "the American Medical and Philosophical Register," from which much is expected. From the prospectus

we quote the following sentence, as expressing the opinion of the Editors on a most important subject:—"They have no hesitation further to declare, that upon the subject of the *pestilential or yellow fever*, which has lately made so great devastation in different parts of the United States, it will be one of the principal objects of their labours to combat the theories and opinions which many of those works have disseminated, to the discredit of our country, and perhaps to the loss of many valuable lives. To establish the line of distinction between those diseases which are of a foreign source, and such as are engendered at home, is an undertaking which must receive the countenance of every person actuated by love of country or humanity, and one in which the editors will embark with all the spirit of generous enterprize."

Reply to Dr Stock's Remark in his Memoirs of Dr Beddoes.
By the EDITORS.

WE have no wish that our *Senatus Academicus* should incur the displeasure of authors and their friends, whose wrath may sometimes be excited by our critical remarks. Conscious that our intention is always good, we never trouble ourselves whether our criticism be considered witty or severe, provided it be wise. It is incumbent upon us, therefore, to declare, in answer to Dr Stock's observations contained in a note to his memoirs of Dr Beddoes (page 378), that the remark which he attributes to the influence of irritation, from offence taken at the freedom of Dr Beddoes's observation on the Edinburgh Faculty, did not arise from any such cause. The reviewer thought that he discovered a want of the author's accustomed acuteness and consistency in that letter on medical reform, and he honestly said so. He thinks so still; but that idea did not prevent the same hand from penning the character of Dr Beddoes, which Dr Stock has done us the honour to quote with approbation.—The writer had no personal knowledge of Dr Beddoes. That estimate of his character was formed from his writings, and was dictated by a high and grateful sense of his public merits.

We may take this opportunity to say, that we have been gratified by the perusal of Dr Stock's memoirs, and to express our wishes that he will soon publish them in octavo, in order that the biography may rest on the same shelf with the writings which it records.

The Reviews of Dr Alley's and Mr Haslam's works have been unavoidably delayed till next Number, which will be published on the 1*st of July* 1811.

CORRIGENDUM.

No. XXV. p. 101. l. 17. *for* suffering and humanity, *read* suffering humanity.

THE

EDINBURGH

MEDICAL AND SURGICAL JOURNAL.

1. JULY 1811.

PART I.

ORIGINAL COMMUNICATIONS.

I.

Cases of Ruptured Spleen and Liver by External Injury, with Remarks thereon. By C. CHISHOLM, M. D. F. R. S. &c. &c.

THERE can be little doubt that death is frequently consequential on blows, and injuries of a similar nature, received on the region of the liver or spleen, although, from the integuments remaining uninjured, little room is supposed to be given to suspect that such blows and injuries could have been directly instrumental in the production of such an event. I am led to this remark, by comparing some recent instances of this kind of injury with others which formerly occurred in my practice in Grenada; the former terminating favourably, from the suspicion raised in my mind by the fatal result of the latter directing to an appropriate treatment. A review of these errors and failures instruct physicians more than any other class of men; an ingenious confession of them enables them to instruct others; and a judicious application of the instruction has a tendency to benefit mankind in general. It is with this view I transmit the following cases. If you deem them worthy of insertion in your very excellent Journal, they are at your service. I extract them almost literally as I find them in my West India Journal.

On the evening of the 27th July 1792, Joseph Morton, a gun-

ner of the royal artillery, aged 25, of a moderate height, naturally strong-constitutioned, but for a year before frequently harassed with dangerous attacks of remittent fever, and by trade a blacksmith, carrying on his back a bag containing eighteen gallons of dry peas, down the declivity of a hill of a moderate ascent, fell with his left side, exactly the region of the spleen, on a large stone. That evening, and all the following morning, the fall occasioned so little uneasiness, that he was able to work at the forge: but afterwards he became very feverish, and so oppressed with pain in his left side, the epigastrium, and lower extremities, as to be obliged to desist. On the evening of the 28th he was brought to the Ordnance Hospital, when I found him much in the situation mentioned. I bled him very freely, which however, so far from giving him relief, seemed to increase his fever to an outrageous degree of delirium. Upon this, imagining that there might be more of a nervous excitement than of inflammatory diathesis, I ordered him a pill of gr. iss. of opium, and gr. ij. of James's powder. This gave him no relief. A second pill was given two hours after the first; and half an hour after taking it, he became calm, and fell into a profound sleep. On the morning of the 29th he had still much fever, but the pains were considerably abated. To remove the fever, he took saline mixture, with small portions of sweet spirit of nitre and antimonial wine. On the 30th he complained of pain in his throat, and excessive difficulty in swallowing. For these a blister was applied between the shoulders; and to obviate costiveness and some remains of fever, a solution of Glauber's salts and tartar emetic was given with desired effect. On the 31st all his symptoms had disappeared, and he felt himself apparently easy and well. About midnight, however, he suddenly became delirious, with burning fever, and such an increase of pain in his left side particularly, as to render even the gentlest touch insupportable. I should have mentioned, that during all the 31st he took a good deal of bark and wine, which towards evening his stomach rejected. On the 1st of August he was in this state, his skin parched and dry, and his pulse irregular, tremulous, and frequently intermitting. In addition to all this, the irritability of the lower extremities excessive, with sudden spasms of the muscles; anxiety great, with grievous moaning. In pretty nearly this state he continued till one P. M. when he expired. The heat of his skin increased to an astonishing degree some time before his death; and even two hours after, when I examined the body, the heat of the abdominal cavity, and its contents, were extremely disagreeable, and of such a penetrating nature, as to leave a painful sensation on the hand some time after withdrawing it.

I opened the body in the presence of Lieutenant Swiney of the artillery, and Mr Campbell my assistant. I found all the intestines, the liver, kidneys, diaphragm, and heart, in a healthy state. But on the posterior superior convex side of the spleen, there was a rupture through the whole of its substance, at least two inches in length, the edges of which had a florid appearance in some places, and in others something like sphacelus could be perceived. The spleen itself was of a very considerable size, but in other respects had no appearance of disease. The lungs were evidently much inflamed. All the ribs were sound, and the integuments had nowhere any mark of injury, except an almost imperceptible discoloration immediately over the spleen.

Nearly about the same time, another case of injury of this nature occurred, in a soldier of artillery of the name of Hill. I find it stated in the following manner: "Lately I have had a case of fever, the predisponent cause of which appeared to be a fall from a considerable height on the edge of a form, in which the side appeared to be much hurt by the internal pain complained of, for no external injury could be perceived. The pain, however, seemed to cease gradually after using for a few days some spirit of wine camphorated. No fever took place till the 11th of August, about three weeks after the fall; and at this time he complained of his side so little that I should not have known of the accident, had it not been slightly mentioned by himself, in the account he gave me of his case. Some time before the fall he was confined to the hospital for dysentery; and at the time he fell, was in convalescent barracks on Mount Cardigan. The symptoms at first did not differ much from those of endemic remittent fever; and my success hitherto, joined to the circumstance of the fall, determined me on giving mercury, in the following form:

℞ Nitri, ℈j.
Calomel, ppt. gr. iv.
Tart. emet. gr. ¼.
Camphor. gr. v.
M. ft. pulvis, sumend. 4 in die.

"In the evening of the 12th I gave, besides the four powders he had taken in the course of the day, a bolus of six grains of calomel; and on account of the fall, and consequent apprehension of local injury, I bled him very freely. All the 13th he used the powders; but complaining of much pain in his neck, back, and head, a large blister was applied between the shoulders. The powders hitherto had acted merely as deobstruents, producing most copious and frequent bilious stools. On the 14th much easier, but stomach rather irritable, for which he took saline draughts with

a large proportion of the alkali.—15th, Still better, except the irritability. Had two pills of opium of gr. iss. each, and swallowed two ounces of bark, but soon after vomited them.—16th, Irritability the same; a yellow suffusion on the albuginea of the eyes; some degree of wildness in the stare of them, but perfectly cool and moist; and pulse natural, both in fulness and quickness. A blister was applied to the stomach, with a repetition of the opium.—17th, The blister produced a total change in the state of the stomach; so that from the 16th, on which it was applied, till the 20th, on which the patient died, he retained every thing that was given to him; but the fever returning this day, blisters were applied to the inside of the thighs, and an opening draught given to him: the yellowness still increasing.—18th, The yellowness has gradually diffused itself over the whole surface, attended with remarkable dryness of the skin; pungent disagreeable heat; some derangement of intellect; parched mouth and tongue; black crust on the latter; saffron-coloured urine; and very fetid frequent stools. Stomach remarkably retentive, which, under the present circumstances, a very extraordinary symptom. Considering the disease now as a true yellow remittent fever, I gave the patient the following mixture, which on former occasions, in nearly similar circumstances, produced the best effect when used at this period of the disease.

Sal. tart. ʒij.
Succ. limon, ℥i.
Pulv. Rhei, ʒi.
Pulv. cort. Peruvian. ℥ij.
Aq. ℔. iss.

M. cyath. sumend. ȝ. q. q. horâ.

"And I continued the calomel gr. v. cum opii gr. i. also four times in the day.—19th, The bark mixture was repeated without the lime juice on account of the mercury; symptoms continue; almost always in a comatous state; body very open; thirst not very urgent; tongue as before. Hitherto his strength has been so little impaired that he has been able to walk alone to the night chair. Sinapisms applied to his feet, and blisters to his ancles. Observed, that although these and the former blisters rose well, they occasioned so little pain, that he did not seem to feel them.—20th, The mixture and pills were assiduously continued throughout the whole night, without creating the smallest degree of nausea; yet every thing worse. About a quarter past nine P.M. he died.

"I opened the body on the morning of the 21st, and as I suspected all along a morbid affection of the liver, I directed my

inquiries chiefly to that viscus. Nothing could have surprised me more than the appearance it assumed. And perhaps there exists not in the annals of medicine a more curious fact than that I am going to describe. The integuments exhibited no mark of injury. On the convex side of the right lobe of the liver, I found a crucial cicatrix, one of the lines of which was in length an inch and an half, the other only an inch. At the extremity of the longest line there was a circular gangrene about two inches in diameter. On cutting open these, I found that the cicatrix penetrated about an inch into the substance of the liver, and was altogether of a semicartilaginous consistence, or something between ligament and cartilage. The gangrenous portion was at least an inch deep, and resembled rotten cork. This remarkable appearance on the liver was immediately under that part of his side on which he fell; and on more particular inquiry, I found that the corner or angle of the form or bench was that on which he fell, a circumstance which accounts for the crucial form of the cicatrix. All the other viscera were in a sound state; only the liver itself was much larger than usual."

I find two cases, recorded in the year 1784, of sailors, of the port of St George, Grenada, the disease in both of which was occasioned by a violent blow on the back, inflicted by tyrannical captains. One of these, by not carrying bleeding to a sufficient length, died. The other, in consequence of very copious bleeding, recovered. In both, the more violent symptoms did not come on till fully a month or more after the injury was received; and in both the most prominent of these were, violent pain in the throat and breast; difficult deglutition; headach; vertigo; rigidity, and a considerable degree of insensibility of the lower extremities; obstructed respiration; and a pain stretching circularly from the pit of the stomach around the abdomen to the back, and a sensation in the region of the stomach, similar to a force drawing that part of the abdomen towards the back with great violence, and straitening of the thorax. Pulse full and quick; and surface hot and dry. In the body of the sailor who died, I found the coats of the stomach of an uncommon thickness; and all the vessels having the appearance of a preparation well injected with wax. The small intestines were sound. The great arch of the colon was considerably inflated, and its blood-vessels were turgid; and the whole of its external surface had the same appearance as that of the stomach. The interior surface was either blackish, dark-brown, or dark-red, and loaded with a dark-coloured mucus. The villous coat was in most places in a dissolved state. On removing this, small, hard, black, rough excrescences, some-

what of the nature of eschars, appeared, adhering firmly to the cellular coat. The liver was uncommonly small, and of a grey or cineritious colour. It is remarkable, that in these cases, the blow was inflicted in one a month, in the other two months, before any symptoms appeared, the appearance of which rendered medical aid necessary; that both patients firmly attributed their complaints to this injury; and that they had been in perfect health before the infliction of it; and that no external injury could be perceived on the part struck.

These I apprehend are cases of the rachialgia traumatica, (Sauvages, Nosol. Method. Tom. II. p. 137.); probably a rare disease. * The result is certainly important, as the mode of treatment, stated as a desideratum by Astruc, seems to be ascertained by it; for if the cause has been a blow on the back, as here, the remedy is undoubtedly bleeding—copious bleeding.

Since I have been in practice here (about four years), I have met with a few cases, the cause and early symptoms of which have been similar to those of Morton and Hill; but immediate bleeding to a large extent, aided by a gentle ptyalism, keeping the patient in a state of tranquillity, and obviating torpor of the bowels, prevented the fatal consequences which otherwise might have resulted. The most recent case occurred about a month ago, the happy termination of which has indeed been my immediate inducement for drawing up this paper. A gentleman of high military rank having, at dinner in the country, about three miles from Bristol, drank too freely of wine, attempted to return to his lodgings in town on foot, accompanied indeed by another gentleman and a servant, but whose assistance he would not permit. In consequence he had several falls, in one of which he struck his right side, immediately over the liver, with great violence against a stone in the bank of the footway. On the following day, having forgot his situation the preceding night, he was astonished to find his side excessively painful, without the least appearance of external injury. For nearly two days, he endeavoured to draw off his attention to feelings which he conceived to be imaginary; but the pain becoming altogether insupportable, he at length consulted me. From his own account, joined to that of his servant, and the gentleman who walked into Bristol with him, I formed a correct conception of the nature of his complaints. I had, at three bleedings, in the course of twelve hours, fifty ounces of blood drawn, when he experienced relief;

* Ea est scilicet rachialgia, quæ ex ictu spinæ dorsali inflicto ortum ducit. The question is put by Astruc (l. c.) an morbo colicæ pictonum, rectiùs rachialgiæ dicto, sectio?

had his bowels freely evacuated; and excited a slight ptyalism by means of calomel. In three days, he was so much better, as to be able to bear a journey to his seat in the neighbourhood of Taunton. Since then, he has informed me by letter he has perfectly recovered. This gentleman is corpulent, of large stature, and robust.

It is not meant to be inferred from these latter cases, that when all similar accidents, followed by such symptoms, take place, the liver or the spleen are necessarily lacerated or ruptured; but it may certainly be reasonably inferred, that viscera equally important are injured; and that the treatment here described, is that which is most likely to, and probably alone can, prevent the fatal consequences which may be expected from them. This too is the caution dictated by the experience of others, as well as by mine. Morgagni, treating of such cases, says, "you, therefore, if at any time you know that, besides the violence of the blows upon the abdomen, there was at that time a distention of the intestines from any cause whatsoever; and very considerable and peculiar symptoms come on; will suspect what might happen inwardly, although you see *no mark of injury* in the skin; and if you are able to do nothing else, you will at least declare your suspicion to those whom it may concern, and that cautiously and with discretion. And, indeed, if there has not been that distention, and *those symptoms do not immediately come on*, do not then be without all fear, lest some latent evil gradually increase, and the symptoms thereof break out universally and unexpectedly." (Alexander's Transl. Lect. 54. Act 15.) There cannot be a more luminous comment on the foregoing cases, particularly that of Hill and the two sailors, than this. The comment and the cases naturally illustrate each other.

The practical importance of the cases I have detailed, may perhaps be my apology for indulging in a little research. Morgagni, in his fifty-fourth Letter, relates several instances of the viscera of the abdomen being ruptured without the integuments being injured; nor indeed, as he observes, is it new or unusual that the parts which are confined in the abdomen should be ruptured without the abdomen itself, which first meets the blow, being at all injured; but perhaps the practical benefit which may be derived from a consideration of such accidents, has not been sufficiently attended to. He mentions two cases from Tulpius, one of which was similar to Morton's, of ruptured spleen from a blow inflicted by a stick, ending fatally on the day following; and thus so far different, as Morton survived the injury six days. He quotes instances from Fontanus, Grassius, Raygerus, from the Commentaries of the Imperial Academy of Petersburgh; from

Heister, Bohn, and Platner. The last of these writers observed, that rupture of the spleen from violent concussion of the abdomen, more frequently happens, than of any other viscus. Some remarkable instances are added by Morgagni, of rupture of the kidneys, and one of the bladder, when it happened to be full of urine. He also gives five instances of ruptured livers from kicks, falls, and blows with a stick; but in all these there is nothing like the case of Hill; nor in his whole work is there one similar to it. And as his examination of diseased bodies, and his knowledge of the morbid anatomical researches of others, have been more extensive than perhaps those of any other, we may, I imagine, very justly consider Hill's case as almost unique, especially if we attribute the appearances on the surface of the liver to the fall; and it appears to me necessary that we should. Dr Baillie says, that the liver, from its peculiar structure, and from its situation in the body, is more liable to be ruptured by external violence than any other gland of the body,—but he mentions no such result as this:—for although he has seen a few instances of a part of the coats of the liver changed into cartilage, yet he allows it to be a rare occurrence; but such a state is not that which I have described. The sphacelus or gangrene in Hill's case is also particularly deserving notice. Dr Baillie considers mortification of the liver to be a very rare occurrence, from its not having fallen under his own observation. (See Morb. Anat. ed. 1797, p. 211—229). That it more frequently happens in warm than in cold climates, I think very probable; for in the former I have met with several instances. In one case of hepatitis, which terminated fatally, I find the state of the liver thus described: "On entering the room where the body lay, we were instantly assailed by a most disagreeable smell, proceeding from the body; and on opening the abdomen, on each side of which externally there was a considerable extent of lividity, the fetor became so intolerable, that we could with difficulty support it whilst we were examining the liver. The state of this viscus sufficiently satisfied us, however. Three-fourths of it were composed of three abscesses full of pus; and the remaining fourth was so far sphacelated, that it resembled rotten wood, and crumbled on handling it in the manner it does." The date of this case is September 1786. Another case occurred in September 1788, in Grenada. The subject of it was the servant of Mr Thomas Porter of Demerary, now of Rockbear in Devonshire. The symptoms of this hepatitis were more violent than in any of the many thousands I have had occasion to treat. On the third day of the disease, it is stated, that "the difficult respiration increased

in such a manner as to throw him every three or four minutes into dreadful spasms; he could not bear for a moment an horizontal posture, but was obliged to sit continually on a chair, with the back of another chair before him to lean on." This increased on the fourth day, attended with large drops of cold clammy sweat; and on the evening of this day he died. On examining the liver, I found the concave surface totally sphacelated, and an abscess and adhesion on the convex. It is the justest observation in medicine, that as is the violence of the inflammation so will its termination be;—when excessively acute, as in this case, if it yields not to medicine, it will be sphacelus; if less acute—suppuration; if still less—resolution. In Morgagni, (Alexander's Transl. Vol. II. p. 143), I find a case nearly similar to this, with this difference only, that the right curvature of the colon, and the contiguous psoas muscle were also affected with gangrene. The subject of this case was 70 years old, and "given to wine." In an epidemic marsh remittent, which prevailed among the soldiers of the royal artillery in Grenada in September, October, and November, of the year 1791, (an account of which was published in the Edin. Med. Commentaries for 1793), the livers of two of the sufferers by that fatal malady were sphacelated and rotten. Before I quit this subject, I may mention that, in the liver of a clergyman, my intimate and highly respected friend, Mr Wingate of St George's, Grenada, who died of dysentery, a substance of a round form and suetty consistence, about the bigness of a small pullet's egg, contained in a bag of a semi-cartilaginous structure, was found. The cause of his death, however, was the most usual one in dysentery—mortification of the colon, &c. This gentleman had a fall from his horse about eighteen months before, and immediately after complained much of pain in his right side, and other symptoms, which induced me then to treat him as for hepatitis: but whether his fall gave rise to the formation of the suetty ball, or whether a small abscess was produced, the matter of which in time acquired this consistence, I shall not take upon me to determine. The cysts described by Dr Baillie, I apprehend, are evidently of a different nature from this. His cysts were composed of a kind of cartilaginous substance, mixed with bone, &c. (p. 227). Morgagni, in his 36th Letter, Art. 14., mentions several instances of something similar to this having been seen in the spleen; and Dr Baillie (p. 256) says, that this cartilaginous state may be considered as in a great measure peculiar to the spleen: but in all these instances no mention is made of their cause.

It will be deemed a very curious circumstance, that the rup-

ture of an organ so unsusceptible of pain, and so unproductive of danger when extirpated from the body, as the spleen is said to be, should prove fatal in the case of Morton. How is this to be reconciled with the accounts handed down to us by many respectable authors, and which seem to have been adopted by so experienced and skilful a physiologist as Dr Baillie? (p. 261.) But the opinion of its want of susceptibility of pain, I have much reason to doubt; and a case of splenitis, which I shall subjoin, supports me in this doubt. That it should be an organ whose subserviency to the general purposes of the animal economy is so trifling, as that economy suffers little or no derangement on its extirpation, is also an opinion I cannot perceive the reasonableness of, seeing it is altogether inconsistent with the wisdom and providence of our Creator, who hath made nothing in vain, and that in many instances it is even combated successfully by opposing facts. Mr Home has rendered it highly probable at least, that the spleen has a use, which he has endeavoured to demonstrate by experiment, viz. to carry off the fluids not necessary for digestion, from the cardiac portion of the stomach. Such a theory does not seem, however, to correspond with a fact which inclines us to assign an office of higher utility to this organ. * I suspect indeed we are still to seek for its office; and the following fact increases the mystery of the problem; or, if

* The theory of Mr Home is probably not altogether new, although not before demonstrated by experiment. Hippocrates seems to have had an idea of this kind when he wrote the following passage: "Ventriculus dum plenus est, omium horum (viz. bilis, sanguis, hydrops, et pituita) corpori fons est. Sunt autem et alii fontes quatuor, a quibus unusquisque horum humorum in corpus procedit, postquam sane ipsi a ventriculo acceperunt. Et sane sanguini fons est cor, pituitæ caput, *aquæ splen*, (τῷ δὲ ὑδατι, ὁ σπλην πηγη ἐστι), bili locus folliculi in hepate," (De Morbis, Lib. iv. c. 2. ed. Vanden Linden.) In the ninth chapter he proceeds to say how the spleen attracts water from the stomach; but, as may be expected, he is not very intelligible, seeing the connecting vessels between the stomach and spleen he speaks of, are not to be found. Riolanus, in his Enchiridium Anatomicum, (p. 143, ed. Frankfort, 1672), mentions this idea of Hippocrates, adopted by him from Aristotle. "Hippocrates serum superfluum ex ventriculo emulgere credidit, quam opinionem secutus est Aristoteles," &c. Yet Riolanus himself inclined to the opinion of its being reservatory or supplementary in its office (p. 146). This last seems also the opinion of Mr Saumerez. (New System of Physiology, Med. Rev. Vol. V. p. 129). Dr Drake's very singular and instructive case of "Diseased Spleen," I conceive to be likewise referable to this theory of that organ, deranged in its functions by a cause obstructing or preventing the regurgitation of its elaborated blood. (Med. and Surg. Journal of Edin. Vol. II. p. 409). The evident desiderata in the treatment of this well-detailed case, were bleeding and mercury in the early stage of the complaint. When these, particularly the last, were recurred to, the favourable period was gone by. It indeed furnishes an additional illustration of the medical precept, the promulgation and recommendation of which were my motives for publishing the foregoing paper.

it throws any light on it, it probably does so by strengthening the opinion that the spleen is a saccus succenturiatus, a function attributed to the gall-bladder by Dr Parr, (See Med. Dictionary, Art. Jecur). "Samuel Mitchel, Esq. of the Island of Grenada, late of Devonshire, informed me," (I extract the fact from my Grenada Med. Journal, ending in 1794, when I left that island), "of his having been for many years troubled with a very considerable enlargement of his spleen, brought on by repeated attacks of remittent fever; but on going to England in 1784, and remaining there till the year 1790, the enlargement gradually disappeared. Soon after his return to Grenada, the former fever afflicted him again, and with it the spleen again enlarged; and such was the extent of the disease, that it might be distinctly felt considerably below the navel, and in the right hypochondrium. This was the state of it in the year 1792 when I first felt it; and it is remarkable, that in proportion to the number of febrile attacks was the size of the spleen. A sensible Negro woman, the nurse to the hospital of Bacolet estate, on which Mr Mitchel resided, informed him, about this time, that the complaint was a very common one among the children, and that the most effectual cure she had experienced, was frequent pressure, or kneading, as it were, of the spleen. She advised him to have recourse to the same treatment, and for medicine to use about *a table-spoonful* of the rust of iron every second morning. He assured me that the spleen, after every operation or kneading, became less; and in fact on the 20th of August (1792), when I last saw him and felt the abdomen, it had evidently diminished more than one half, although during this time he had frequent returns of his troublesome remittent." Is not this case an illustration of Morgagni's theory of the cause of the remarkable large spleens which have been sometimes met with? (See Letter 36, Art. 18). He mentions some weighing 15½lb, and others of the almost incredible weight of 23lb and 33lb.

After all, and giving due consideration to the various theories which have been proposed, I am inclined to think that the principal, if not the only use of the spleen, is to perform the double office of receiving the blood not necessary for the general purposes of the economy, thereby to preserve more important organs from too great distention and rupture (a function for which it is solely designed according to Dr Rush), and during its detention to elaborate that blood into a state necessary to give agency to the bile in the great work of chylification. I am disposed to adopt this opinion, 1. From its coalescing the opinions of almost all physiologists respecting the use of the spleen. 2. From the spleen being a sac, or a collection of sacs united by

a common enveloping membrane. 3. From the disproportioned size of the splenic artery to the organ to which it conveys blood, (arteriæ illæ, satis magnæ, et jecoraria, incredibili mensura, majores Boerh. Instit. 315). 4. From the spleen having no excretory duct. 5. From the splenic vein being the only channel by which the contents of the spleen are discharged. And 6. From these contents being conveyed by the splenic vein into the trunk of the vena portæ, and thence exclusively into the liver. Hence the perspicuity of the aphorism of Sylvius: Non videtur enim tàm simpliciter ad vitam, quàm commodiorem vitam datus animalibus lien. (Prax. Medicæ, lib. i. c. 43. s. 6). Hence, too, appears the rational inference which Boerhaave drew from a correct examination of the structure and connexions of the spleen: Apparet quidem manifestissime quod omnis hujus actionis fructus in liene nascatur, sed neutiquam ei inserviat: verum quum omnis sic confectus, humor eat in unam venam Portarum et hepar; patet usum splenis inservire hepati, &c. (Institut. Medicæ, § 323—326. Ludg. Bat. 1734, p. 174).

I subjoin the case of splenitis.—A man of a strong athletic constitution and cheerful disposition, in the month of December 1784, was spontaneously seized with a pain in the left side, where the spleen is situated, attended with considerable heat and tension of the part, and some degree of fever. His belly after the two first days was regular, and his appetite for food tolerably good. After the two first days of his complaint the fever abated very much, but the least pressure on the part where the pain was felt was intolerable. He had no headach, but some lassitude in his limbs, which continued after the fever disappeared; and his strength gradually diminished notwithstanding his animal functions did not seem much impaired. I saw him three or four days after the accession of the disease, and, imagining at first that the pain proceeded from some degree of inflammation of the left kidney, I drew near a pound of blood, ordered a blister to be applied, and prescribed nitrous and emollient medicines. He continued these for a few days without experiencing any relief. I found now he had no symptoms peculiar to nephritis, a circumstance I was deceived in when I first saw him, but that the pain and other affections evidently indicated inflammation of the spleen, and I therefore determined to treat it as a case of hepatitis. The fever and tension being gone, I ordered calomel in the following form:

℞ Calomel, ppt. gr. xxx.
Opii, gr. iv.
Camphor, ℈ij.
Mic. panis, q. s. ut ft. pilulæ viginti. Sumat unam mane et vespere.

He took the twenty pills by the time I next saw him; they had brought on a gentle spitting, and had almost totally removed the pain. I continued them one morning and evening, in order to support the salivation; and, in about six days more, he was perfectly recovered. *

Clifton, 19th April, 1811. C. CHISHOLM.

II.

Case of Erythema Mercuriale. Communicated to Dr ADAM BURT, by ANDREW RAMSAY, Esq. Assistant-Surgeon in the Honourable East India Company's Service.

MY DEAR SIR, *Seetapoor, 2d Sept.* 1810.

I HAVE now the pleasure to send you the case I promised. When I began to draw it up, I thought it might be interesting, as I was not aware of that complaint attacking the natives, and as it has only lately been taken notice of. I have since observed, however, in the Edinburgh Medical and Surgical Journal, an extract of a letter from Madras, in which it is stated to be very common in that establishment. I myself have never seen it before; and I am very much in the habit of prescribing mercury. I send it to you, however, as it shows that a return of it may be expected on a second exhibition of the medicine. This circumstance makes me suspicious, that it does not arise from cold so much as from a peculiarity in the constitution. I think, also, that were it the effect of cold, we should meet with it much more frequently; and that the mercury, instead of augmenting it, would, as in other cases arising from cold, tend to remove it, by its being quickly thrown in. During the second attack, there were no catarrhal symptoms, nor affection of the eyes; but that may be accounted for by the attack being slight, in consequence of the mercury having been stopped so early.

* Hippocrates gives a case of excessive pain in the spleen; in which, after bleeding and abstinence had been employed, the disease became worse; but was at last cured by drinking a particular kind of wine (οἴνῳ μέλανι λευκῷ), vinum bibit nigrum tenue, sanatus est. Epidemics, (Lib. vii. c. 57.) This black wine was probably of those mild kinds he speaks of in another place, which possessed a purgative cooling quality, οἴνου μαλακοῦ μέλανος.—(De Diæta, Lib. ii. c. 22. ed. Vanden Linden.)

One thing remarkable is, that the gonorrhœa stopped on the affection taking place.

CASE OF ERYTHEMA MERCURIALE.

Bechook Singh Sipahee, æt. 21, a stout healthy lad, was admitted into the hospital on the 6th April 1810, with a gonorrhœa and small chancre on the prepuce. He was ordered to use an injection of the acetate of zinc, and to take a pill, containing three grains of the submuriate of mercury at bed-time. This he continued till the 12th, when he was directed to rub half a drachm of the unguent. hydrargyri into the thighs every evening. His mouth became considerably affected; in consequence of which, about the 18th, the calomel was omitted. About this time also, a number of red points appeared on the inside of his thighs, which he complained of on account of the itchiness which they occasioned. These gradually increased in number, and extended over the whole thighs, genitals, and loins; appeared on the arms and sides of the chest and neck, and were accompanied with great heat. The man was naturally very black; the eruption was a dirty light red colour; did not appear to contain a fluid; was perfectly distinct, and the tops of the papulæ were completely flat. The salivation entirely ceased; his mouth and throat were swelled, and he had complained of a difficulty of swallowing for some days before. He became feverish, and had a severe headach.

I was at a loss what to make of the case. The eruption had a very different appearance from any venereal one—indeed from any kind I had ever seen; and although this, from the insidious nature of lues, and from the endless variety of ways in which it shows itself, did not authorise me to decide upon its not being venereal; yet, as it appeared so shortly after the infection, in a lad who declared that he had never been diseased before, I could not fancy it to be venereal. We were encamped on a damp situation, by the side of the Gogra at Kyreegush. We had had a change of weather a few days before, and the air was cold and muggy. I therefore naturally concluded that my patient had caught cold; and, in consequence, that the ptyalism had become suspended, and hence the pain and swelling about the fauces, &c. I therefore directed him to keep himself warm, and to sleep upon a high charpace, which was provided for him. The mercurial friction was discontinued on account of the eruption, and he was ordered to take a calomel pill morning and evening.

April 24th.—Eruption increasing; very rough to the touch;

extending almost over the whole body, excepting over the breast. No return of the salivation; face and fauces much swelled; hot and feverish; tongue rather foul. The pills were increased to four grains each, and he got a draught with thirty drops of tincture of opium at bed-time.

26th.—Eruption and fever increased; pulse 120; difficulty in voiding urine; has left off the injection for some days; no salivation; belly costive. Ordered a small dose of rhubarb, with ten grains nitrate of potass. Cont. alia.

28th.—The eruption on the lower part of the thighs is falling off, and has a scaly appearance; but from the upper part, and particularly about the scrotum and perinæum, there is an exudation of a greenish fluid; mouth and tongue swelled and painful, but no salivation; the eyes are watery and painful, and the eyelids seem swelled. Pulse 120, and not strong; thirst considerable; belly regular. He was ordered a saline julep, and the parts affected to be washed with a solution of the muriate of mercury.

30th.—Eruption, exudation, and fever increased; no salivation. I now began to suspect that the remedy I was employing was in fact the cause of all the mischief. I remembered to have read Dr Spens's account of some cases of the erythema mercuriale, in the Edin. Med. and Surg. Journal, and I regretted much that I had not the book to refer to; and from any others which I had, I could get no information. I remembered one part of his practice, however, which was immediately to stop the mercury; and this I now did, and gave two scruples of bark three times a-day. The solution of the muriate of mercury seemed to do harm instead of good, smarting the parts much, and adding to the itchiness; it was therefore discontinued, and the parts dusted with flour to absorb the moisture.

May 2d.—The erythema is very general, and the discharge from almost the whole body is copious and horribly offensive. It is a thin, greenish yellow ichorous fluid, which, by drying on the surface, has formed an incrustation, through chinks in which the matter flows. Pulse about 120, and feeble; strength much reduced, but his appetite is very great; tongue rather furred, but moist; rests ill during the night. To have ten drops of laudanum added to his draught; ordered him four ounces of Madeira in the day, which, being called medicine, he had no objection to take.

4th.—Suffers much uneasiness and distress. Cuticle or incrustation falls off in large pieces. The odour is so unpleasant and so peculiarly *cutting*, that it is almost impossible to approach him. Appetite so much increased, that he says he eats three times as much as ever he did before. His eyes are much affect-

ed, and almost shut up by the swelling of the eye-lids; solution of acetate of lead for eye-water—also to be applied to one arm and thigh.

8th.—Uneasiness increased by the wash, therefore to be discontinued. Strength very much reduced; discharge very considerable. Ordered the bark six times a-day.

14th.—Has continued much the same. Having had considerable purging to-day, six drops of laudanum were given with each dose of the bark.

16th.—A large boil has appeared on the spine of the left ileum. Diarrhœa abated. Appr. cataplasm. commun.

18th.—The teguments about the boil have a glossy ill-coloured appearance; exudation less; eyes much better; pulse 116; belly costive. Omit the tinct. op. with each dose of the bark.

19th.—The boil has burst and discharged a quantity of matter; another has appeared in the right axilla; says he feels much better to-day; appetite considerably diminished; exudation also seems less. Notwithstanding the great care taken to keep him very clean, the smell arising from his body is almost insupportable. The incrustation falls off in large portions.

21st.—Although great care be taken to keep the flies from his body, yet they have been attracted in such numbers as to give him more annoyance than the disease. The boil is filled with maggots, some of a very large size. The sore to be washed with brandy, and dressed with ungt. cerae.

23d.—Suffers much. The boil in the axilla and another on the left elbow have burst, and are full of maggots; twenty-five were taken from the large one this morning; discharge offensive as before, but much less. To take four doses of bark in the day. Augr. vin. ad. ℥vi.

26th.—Sore on the haunch gets clean and free from maggots; boils are forming over different parts of the body, which burst, and contain those animals. Feels himself considerably better. Tongue clean; pulse 100.

31st.—Sores clean and healing; has much less uneasiness over his body; feels himself much stronger, and sat up for half an hour to-day.

June 2d.—The skin over most of his body is becoming clean, and in some few places much lighter coloured. Belly costive; pulse 98. Sumat. pulv. lax. et omittr. haust. From this time he became gradually better, and was soon able to walk about. The chancre was completely well; and, during his illness, his gonorrhœa had left him. On the 10th July he appeared perfectly well in every respect, and I was going to send him out to his duty; but as I was by no means certain that the venereal was eradicated, and I had a wish to know whether the erythema

would return or not. As it is assuredly of some consequence to be certain, whether the disease in question arises from the action of mercury upon a peculiar constitution, or from the effects of cold upon the system while under the influence of that substance, I determined to put this patient again under a regular course of medicine. On the 20th of July, therefore, when he had regained his strength and flesh completely, he began by taking three grains of calomel at bed-time (I used calomel, as he had taken it before); he was put into a room by himself, and desired to be very careful not to expose himself to cold; and I believe he was particularly careful of himself.

On the 24th he felt his mouth a little sore, but that went off on the 25th. On the 26th the pills were increased to four grains. On the 29th he was ordered to take one morning and evening.

August 4th.—Mouth gets sore. Omittr. pilul. mane.

6th.—Salivation considerable. Omittr. pilul. vesper. Great care to be taken against cold.

14th.—Mouth better; salivation less. To rub in half a drachm of the ointment in the evening.

16th.—Felt an itching over his arms, which has gone off today. Contr. unguent.

17th.—Complains of a return of the itchiness over his arms; the inside of the right feels rough.

20th.—There is a slight eruption over the tops of his thighs; that on his arms has increased; says that the feeling is exactly what it was before. Omittr. unguent. hydrarg.

21st.—Eruption increasing; has the very same appearance as what it had before.

30th.—The eruption is considerably less, and falling off in small scales; the itchiness is considerably abated. At the upper part of the thighs, however, there is slight exudation.

Sept. 1st.—Itchiness and eruption considerably increased today over the thighs and arms; exudation from the groins and perinæum; several small hard boils over his arms and legs. Appr. liniment. aq. calc.

2d.—Exudation from the arms; eruption appearing over the chest. Belly costive. Sumt. sulph. sub. ʒss. h. s.

4th.—Exudation less; eruption in most places falling off in a scurf.

7th.—A considerable discharge for two days past from around the umbilicus; from the other parts diminishing. Belly costive. Capiat. pil. purg. iij. ex *jemal gowta* compos.

11th.—Exudation and eruption gone. General health good.

To the Editors of the Edinburgh Medical and Surgical Journal.

GENTLEMEN,

I HAVE the honour to submit this paper to your consideration, leaving it to your judgment to decide whether or not to insert it in your Journal. The communication has been addressed to me by Mr Alexander Ramsay, assistant-surgeon, in medical charge of a battalion of native infantry within the district of my professional superintendence. On the accuracy of this gentleman's report every reliance may be placed. The erythema mercuriale occurs sometimes, though but seldom, in this country; the disease has been but lately described to the public; and when it occurs, the practitioner is not always at first aware of its nature. In each of the few cases of this disease which have come under my observation, the affection of the skin had ensued from rubbing in mercurial ointment.

Bengal, 7th Nov. 1810. ADAM BURT.

III.

Analysis of the Cactus Coccinillifer. By JOHN BOSTOCK, M.D. Liverpool.

IN one of the late Numbers of your Journal, * you give an account of some observations that have been made in the East Indies on the cactus coccinillifer, both as an article of nutrition, and especially as possessing antiscorbutic properties. You conclude by expressing a wish that some one would endeavour to ascertain whether it contains any citric acid; and it was principally with this intention that the following experiments were performed. A portion of the leaf of the cactus, which weighed 100 grs. was cut into small pieces, and was then strongly agitated in a bottle with ℥i. of water. It was then squeezed through a linen strainer, and nearly one ounce of a mucilage was procured, which was of about the consistence of albumen ovi, and was so tenacious, that it was scarcely possible to divide it into separate portions. Another ounce of water was then added to it, and it was again strongly agitated in a bottle, by which means it was re-

* No. 20. Vol. V. p. 481.

duced to a consistence similar to that of the serum of the blood, and in this state was made the subject of experiment. The residue of the leaf, that had not passed through the strainer, weighed 73 grs.; but after being for some time exposed to a gentle heat, it was reduced to a little more than 5 grs. The mucilage was nearly transparent and colourless, and without any peculiar taste or smell. It remained for a considerable time exposed to the atmosphere, without undergoing any alteration; but gradually it deposited a small quantity of a flocculent matter, and acquired a slightly putrid odour. Although the consistence of the mucilage appeared to be very nearly the same with that which is produced by dissolving one part of gum Arabic in ten parts of water; yet it was found, upon evaporation, to contain not more than 1-100th of its weight of solid contents. There was an obvious difference between the consistence of the cactus mucilage and that from gum Arabic; a difference which, I conceive, will be comprehended, by stating that the latter is more glutinous, and the former more tenacious. In this respect, the mucilage of the cactus approaches to that of linseed. The mucilage, although it appears to be indefinitely soluble in water, is not easily incorporated with it; but by strong agitation in a bottle, a complete union may be formed. By the test of litmus, the mucilage was found to be very slightly acid. The quantity of acid was so small, that 250 grs. had its acid apparently neutralized by one drop of a solution of potash, formed by dissolving one part of the kali purum of the Pharmacopœia in four parts of water; the addition of three drops caused the mucilage to be decidedly alkaline. This acid could not be the oxalic, because the oxalate of ammoniac threw down a minute quantity of a powdery precipitate, proving that the fluid contained lime. In order to ascertain whether this lime was united to an excess of citric acid, lime water was gradually added to convert the supercitrate into the citrate of lime, but no precipitate was produced. To try whether it was the tartaric acid which existed in the mucilage, potash was added very gradually, but no precipitate was formed. I do not, indeed, conceive that these experiments prove the absolute non-existence of either the citric or tartaric acids, because the methods employed for detecting them do not appear applicable to discover them when in very minute quantity. This, indeed, appeared to be the fact; for when very dilute solutions of the citric and tartaric acids were formed, neither the lime water in the one case, nor the potash in the other, threw down any precipitates. I conceive, however, that we may be warranted in concluding, that the power of the cactus coccinillifer does not depend upon any acid which it contains.

I afterwards examined the action of some of the reagents, which I had formerly found to produce peculiar effects upon different vegetable mucilages. Although lime-water did not throw down any of that powdery precipitate which indicated the formation of the citrate of lime; yet I observed, that after lime-water had been for some time in contact with the mucilage, the sides of the glass were coated with what appeared to be small particles of gummy matter; and I found the same effect to be produced in a greater degree by barytes water. It would appear to arise from a weak action between the mucilage and the earth, by which a partial separation is produced of the vegetable matter from the water that holds it in solution. When alcohol was added to a mucilage of about the consistence of serum; that is, when it contained about 1-200th of its weight of solid matter, the two fluids were incorporated by agitation in a bottle, without any visible change being effected; but when the mucilage contained 1-100th of its weight of solid matter, the alcohol separated it in the form of a spongy mass, without rendering the fluid in any degree opaque; in this respect agreeing with the mucilage of linseed, and differing from that of gum. The oxymuriate of tin, and the nitrate of silver, also formed a spongy precipitate, while the acetate of lead produced a copious dense precipitate. Silicated potash, the oxysulphate of iron, and the nitrate of mercury had no effect on the mucilage.

These experiments show, that the substance which enters so largely into the composition of the cactus coccinillifer is, in most respects, similar to the mucilage of linseed; and that, if the distinction which I formerly * pointed out between gums and mucilages is to be considered as having any foundation, the substance in question must be placed in the latter class.

The effects of the reagents differ so much in almost all the varieties of gums and mucilages, that we are led to inquire, whether this depends upon a peculiar action which is exerted between the gum itself and the reagent; or whether it may not depend upon the extraneous bodies which are known to exist in gums? Gum Arabic, for instance, contains a considerable quantity of lime, and possesses the singular property of precipitating silicated potash;—does the effect in this case depend upon the gum itself, or upon the lime which is combined with it? To ascertain this point, I added oxalic acid to the mucilage of gum Arabic, until all the lime was separated in the form of the oxalate. It was then diluted with water, so as to permit the precipitate to subside, and was afterwards evaporated to its for-

* Nicholson's Journal, 18, 38.

mer consistence. Oxalic acid now produced no effect upon it, and yet it still precipitated silicated potash. We may, therefore, conclude, that there is a specific action exercised between gum Arabic and silex. There can be no doubt that when the acetate of lead is added to gum, an union takes place between the gum and the lead, because the water of solution is obviously deprived of its viscidity. I endeavoured to ascertain the proportion in which gum Arabic and lead unite: In one experiment 50 parts of gum united to 35 of lead; and in a second, 30 parts of gum to 20 parts of lead; but there is always some uncertainty in operating upon vegetable substances, from the difficulty there is in separating the precipitates from the fluid, and reducing them to the same degree of dryness. Besides, I am disposed to conceive, that in this, as in many analogous cases, the nature of the compound is influenced by the circumstances under which the experiment is performed.

Knot'shole Bank, near Liverpool,
April 27th, 1811.

IV.

Case of Asthma cured by Smoking the Datura Stramonium. By William English, Esq. Surgeon, Great Tower Street, London.

I received the last Number of your valuable publication, with the hopes of finding that you had therein directed the attention of the medical world to the herb stramonium which this country produces, for the cure of asthmatic complaints; for, notwithstanding the uncourteous style and illiberal abuse so lavishly dealt out against the profession in general, and "the regular" or highest class in particular, by a late author, I am persuaded that you are by far too dignified to reject any benefit to be derived to society, and medical science especially, however malignant or impure the source from whence it may flow. Should you deem the following case worth a place in your excellent repository, I trust you will insert it, being an humble attempt to confer that blessing on others of which I have lately so largely partaken myself.

When a boy, I was subject to wheezing and shortness of breath

upon any slight cold, which wore off as I grew up, and for many years I forgot it; but when in China, in the year 1799, I was seized with a severe paroxysm of spasmodic asthma, accompanied with hepatitis; since which time, I have been frequently, and, for later years, I may say constantly, afflicted with asthma. The paroxysm commences with the usual symptoms of cold, together with purging and much evacuation of urine, succeeded by intolerable flatus in the stomach and bowels; frequent convulsive cough; constant wheezing; with painful dyspnœa, being unable to fill the chest with air: any sudden exertion; speaking above a word or two together, or attempting to walk up a hill or up stairs bring on suffocation; much frothy tenacious saliva is discharged from the throat, with some congealed phlegm from the bronchia; and in the mornings, what is expectorated is often streaked with blood, and sometimes a little pure blood is coughed up. The paroxysm runs its course in from three to five days, when the flatus subsides, and expectoration becomes free and easy; being, instead of frothy tenacious saliva, and the jelly or white of egg-like substance, common phlegm, with a little good looking pus. Health, appetite, and spirits, quickly return. For the last three years, I have never had an interval of above ten or twelve days free from this distressing complaint. I cannot assign any cause for its commencement; and it goes off as unaccountably. With respect to the cure of this disease, I have been unwearied in my applications to effect it; all my medical friends, both in India and England, have, at one time or another, prescribed for me; and I have not neglected to resort to all the books that came within my reach, which treated on this subject,—but all in vain. A few grains of calomel (submurias. hydrarg.), I have found by experience, is the only medicine that is of service to me, taken on the accession of the fit; it purges and accelerates the evacuation of urine. Diabetes and catharsis, being the first symptoms of an attack, I was led to encourage this natural propensity by taking the calomel; and I soon found it of benefit, by shortening the duration of the paroxysm.

Dr Bree's valuable publication encouraged me to persevere with his plan of cure for upwards of two years, to which I as strictly adhered as my situation would allow; but I am sorry to say, without any other benefit than that arising from taking the infusion of coffee during the paroxysm, which expelled the flatus, and prevented sleep. Always experiencing most misery after a few hours sleep, I was glad to keep awake, especially as I did not find any difference in the duration of the paroxysm whether I slept or not. On this account the coffee was invaluable to me; but still the disease remained uncured; and, in despair, I re-

sorted to the smoke of the stramonium, more with a view towards experiment, than from any hopes of good to be derived from it. The effect, however, was wonderful,—even to me almost incredible: the very first time I smoked, the irritation and constant cough ceased, and the flatus was expelled, and I expectorated from the bronchia pieces of clear congealed phlegm, from half an inch to about an inch in length, and the thickness of a crow's quill, which enabled me to fill the chest with air. The sensation I experienced for the first two or three mornings was no less singular. On the first morning I was called up, about two hours before my usual time of rising, to go to Camberwell. I got ready quickly, not thinking of my complaint, but the moment I stepped into the street, I found I had not power to walk, though perfectly free from pain or any other sensible indisposition. I merely felt exhausted; and so feeble as to want support. Coffee was got ready, and I ate my accustomed breakfast, which restored me at once; and I walked to Camberwell in an hour, the distance being about four miles. I must remark, that when I commenced smoking the stramonium, the paroxysm was declining. It had been the most severe I ever remember to have experienced, and it is the last I have had; though I have frequently taken cold since, but with no other inconvenience than a little shortness of breath and wheezing, which went off on taking my pipe in the evening. I have now been four months free from my complaint, and I have every reason to believe that I shall feel no more from it, though I shall continue smoking the stramonium at intervals, for a length of time to come. The way in which I employ this remedy is thus: I fill a common tobacco-pipe with the stramonium cut in small pieces, and inhale the smoke as much as possible into the lungs, which causes heat and pain about the fauces and throat; and I am obliged to breathe once or twice before I can inhale it again, when I draw in the smoke; and so on alternately until the herb is consumed, which occupies about half an hour once a-day.—The saliva I swallow.

I think it right to observe, that I find considerable difficulty in procuring the stramonium unmixed with other herbs.

Mr Harris, wholesale druggist of St Paul's Churchyard, was good enough to supply me with a little, and on this being consumed, I sent my young gentleman for a fresh supply; but, by mistake, he went to a Mr Harris, patent or quack-medicine vender, and bookseller, also in St Paul's Churchyard, and brought me a packet with a printed paper attached, specifying it to be "Stramoninm, or asthmatic herb tobacco, prepared from the recipe of Surgeon Fisher," &c. &c., and notwithstanding this was as different as possible from what I had before been using

with so much benefit, I was induced to try it; but after smoking it as directed, for three days, I was sensible the complaint was returning; and I verily believe in another day or two I should have been laid up with a severe spasmodic paroxysm of asthma, had I not got supplied with the genuine stramonium; and from that day to this I have enjoyed perfect health.

I am happy to add, that since I have experienced so much benefit from the smoke of the stramonium myself, I have recommended it in two cases of spasmodic asthma with the best effect; and I am so sanguine as to believe, that if this herb is not a specific for this hitherto unmanageable complaint, it will at least prove a most valuable auxiliary to other remedies that may be employed, as I apprehend it will no way interfere with any medicine, &c. that may be deemed advisable.

London, April 24, 1811.

V.

Reply to the "Inquiry into the Exactness of some Statements made by Messrs Nagle and Wilson, Naval Surgeons, respecting their extraordinary Success in the Treatment of Yellow Fever. By a Naval Surgeon." By J. Wilson, Esq. Surgeon, Royal Navy.

Sir,

Having observed, in your Journal for the first quarter of this year, an article, entitled, "Inquiry into the Exactness of some Statements made by Messrs Nagle and Wilson, respecting their extraordinary Success in the Treatment of the Yellow Fever," in which my professional and moral character are attacked, I feel myself impelled by what is due to myself, as well as to the cause of truth, and the best interests of society, to reply to the false glosses and errors into which your correspondent has been betrayed. I shall not take up your pages by enlarging on the unfairness and cruelty of such attacks, nor in descanting on the painful predicament to which a man of sentiment is reduced in having his veracity and honour publickly questioned, and the humiliating task to which he must stoop in vindicating himself, even when possessed of the most ample means of doing so. Waving all this, and admitting that the author is acting *bona fide*, believing in the truth and correctness of his hasty and

gratuitous assertions, it becomes my duty to put him, and those whom he may mislead, right with regard to the points in question.

With a view to this, you will allow me to restate the outline of the narrative which forms the groundwork of this contest.

On the 16th of May 1795, his Majesty's ships Thetis and Hussar, cruising off the Chesapeak, fell in with five French armed ships, two of which, after an action, they captured. We learned that they had sailed from Gaudaloupe, where the yellow fever then prevailed, and that several men had died on the passage of this disease, in La Raison, the ship of which we took possession. Those men who were sent on board to conduct the prize into port, to the number of fourteen, including officers, were all taken ill, and only five survived on their arrival at Halifax, after a passage of eleven or twelve days. The contagion soon began to show itself on board of the Hussar, in consequence of intercourse with the prize. Of these ten, four died in the course of five or six days. The nature of the symptoms left no ambiguity as to its being the yellow fever, with the appearances of which I, having served in the West Indies, was well acquainted. The diagnostic symptoms of that fever, which are so striking, were all present, namely, the yellow suffusion of the skin; the vomiting of a dark-coloured fluid; the burning heat in the stomach and bowels; great malignity; and death after an illness of a few days.

The uncommon aspect and mortality of this disease so alarmed the inhabitants of Halifax, that they requested the commander to order both the sick who had been received into the hospital, and the whole ship's company, to an uninhabited spot on the opposite, or Dartmouth shore. This was accordingly done, and they were accommodated under tents. Here the sickness continued to spread among the crew with exactly the same symptoms with those who were taken ill on board, except that it lost its character of malignity, insomuch that not one of those died who were taken ill after the removal on shore. They were eighty-three in number. My treatment has been criticised by your anonymous correspondent, particularly that part of it which relates to the employment of tartarized antimony, in which he suppresses my remark, that this, as well as blood-letting, could in no case be advisable but once, and that in the very beginning of the complaint, for the purpose of relieving the stomach and bowels of redundant bile. And here I cannot help contrasting this comment with that of Dr Currie, who gives full credit to the reasons assigned by me for this practice. I have only farther to remark, that I feel myself bound in candour to acknow-

ledge, and gladly seize the opportunity of doing so, that, according to my more mature reflection and conviction, I believe I have attributed too much of my success to treatment; being now persuaded that much more was imputable to change of climate, and that neither cold affusion nor any known mode of practice could, in a tropical climate, have produced results in the least parallel to what I witnessed in Nova Scotia.

Your candid and intelligent readers will readily perceive, that this absence of malignity in the cases occurring at Halifax is perfectly conformable to the course which this disease observed in Pennsylvania and New York, as well as in Spain. All the histories of this disease agree in stating, that as the winter approached, not only the seizures were more rare, but that those who were taken ill had it in an extremely mild form. And on this point I beg to refer, not only to the American authors, but to the admirable work of Don Manuel de Arejula on the yellow fever which prevailed in various parts of the south of Spain, in the years 1800, 1801, 1803, 1804; particularly to page 337 of this work, where he remarks, that it proved uniformly to be a signal of the approaching disappearances of that epidemic when it began to remit, thereby becoming less dangerous.

It is ascertained by the most ample historical evidence, both civil and medical, that there are certain contagious epidemics which, in given temperatures of the air, not only entirely lose their malignity, but in a very short time even their existence. The proofs of this with regard to the plague are innumerable; for it appears from all the records of that disease, that it has never existed either in a very hot or a very cold climate; and that in those climates which are susceptible of it, it prevails only at those seasons in which the range of the thermometer is from 50° to 75°. In England it always arose towards the end of summer, was at its height in September, declined in October, and died away in winter. It is equally well ascertained with regard to the yellow fever, that it cannot prevail except within the tropics, or in those seasons of the year in temperate climates in which the heat rises to the tropical height, that is, from 75° to 90°. The facts on this subject, both in North America and in Spain, are so numerous and undeniable, as neither to be resisted nor contested by any candid mind; and the evidence of its spreading by intercourse and contact is equally strong. This is what your anonymous correspondent calls theory and prejudice; as if any thing but the blindest theory and prejudice could lead any one to controvert such established facts and observations, which he does not only without evidence, but in the face of all evidence. The admission of such a theory may be productive of the most dreadful

consequences to society, and actually was so at Gibraltar in the year 1804, in consequence of the governor not being aware of its contagious nature; in which he was farther thrown off his guard by the gentleman, (in other respects of a most respectable character), then at the head of the medical department of the army, declaring as his opinion that it was not infectious. As this most pernicious doctrine is maintained by your correspondent with such an imposing tone of confidence as can hardly fail to mislead some of your readers, I need make no apology to you for availing myself of your widely diffused Journal to counteract an error so pregnant with danger to society, while I at the same time claim your indulgence in affording me the means of vindicating my own character.

Royal Naval Hospital, Plymouth, 31st March 1811.

P. S. I may mention as a farther proof of the preceding observation, that in the end of October last, the yellow fever actually made its appearance in Gibraltar; but by timely means of prevention, and the susceptible season passing over, it became immediately extinct.

VI.

A Case of Purulent Ophthalmia. By W. D. Surgeon, R. N.

JOHN STEPHENS, seaman, æt. 23, at Madeira, June 3, 1810, came with an inflammation of the conjunctive membrane of the left eye, tumefaction of the palpebræ, and *purulent* discharge; no increase of pain from the admission of light; the tunica very vascular; no headach, febrile, or symptomatic affection.

V. S. ad. ℥x.

Aq. litharg. acet. comp. gtt. xx.

Aq. font. ℥viij.

M. pro lotione. The eye covered to exclude the light as in other cases; belly regular.

4th.—No diminution or increase of vascularity; purulent discharge increased; slight headach.

℞ Cal. gr. v.

Mist. magn. vitr. Donec alvus copiose respond.

5th.—The cathartic operated briskly; headach removed; the

eye more inflamed, and great discharge; skin and pulse natural. Rept. med. cath.—Lotio ut ante utend.

6*th.*—Eye less painful; no return of headach; inflammation slightly diminished; the eyelids are glued so firmly together in the morning, although they were wet during the night, as with difficulty to be separated. Several stools yesterday, and two to-day. Scarified the tunica conjunctiva.

℞ Sal nitri, gr. xij.
Aq. ℥iss.

M. 4ter in die sumend. Rept. lotio.

7*th.*—A greater discharge of pus this morning, particularly from the inner canthus; the carunculæ lachrymales enlarged.

Cal. gr. iij.
Mist. magn. vitr.

Foment aq. calid. sæpius. Four stools.

8*th.*—The eye feels as if small particles of sand were between the tarsus; painful irritation and increased secretion of tears on the least motion of the globe of the eye. Rept. foment. The discharge not so thick.

9*th.*—The tunic more turgid, and of a less bright colour; purulent discharge the same. ℞ Ungt. hyd. nit. one part, ungt. ceræ seven parts. M. bis de die pencillo applicand. Appl. empl. canth. pone aur. sinist.

10*th.*—Eye looks considerably better. Rept. ungt. lotio zinc vitr.

11*th.*—Inflammation and purulency diminished. Rept.

12*th.*—The same.

16*th.*—Considerable amendment. Rept.

17*th.*—Very little redness and turgidity; no sensation of extraneous particles; discharge less, thinner, and less purulent. Rept. appl.

18*th.*—Tumid caruncle and palpebræ subsided; very little discharge. Rept.

19*th.* Eye looks nearly well. Rept.

20*th.*—No discharge. 21*st.*—Very well. 24*th.*—Quite well for duty.

My intention of communicating this case is not to controvert the opinion of the cause of this disease, entertained by many skilful and experienced practitioners, at the same time it may elucidate such an occurrence without any *particular* exciting cause. This case happened at a period when ophthalmia was epidemic in the ship, and not one had any resemblance in character or symptoms to the above submitted for your perusal. The *predisponent* cause of the general affection alluded to, as far as I could

investigate, was, returning from a warm climate at an unfavourable time of the year—the latter end of February, and the early part of March, 1810. The exciting causes in the *origin* of the epidemic (if I may be allowed to call it so), were exposure to *cold* and *moisture*. This complaint (opthalmia) so prevalent, gradually began to disappear as we returned to a warmer latitude, though not entirely, for the space of about four months, notwithstanding prompt means were made use of. I cannot account for its long continuance in the ship, unless it be considered, as many respectable gentlemen have sometimes judged it—"*contagious.*" If so, I should concur with the ingenious Mr Goodlad, that such "phenomena (in similar cases of purulency) are modified by the action of the part inflamed."

H. M. Sloop Dotterel, Lisbon, April 4th, 1811.

VII.

Notes on Diabetes Mellitus, as it occurs on Ceylon. By THOMAS CHRISTIE, M. D.

THE enclosed notes on diabetes were written at Columbo in September 1809, a short time previous to my being compelled, from ill health, to leave Ceylon, and were intended for insertion in a work relating to some of the diseases of that island, the publication of which has been deferred.

If you should think them worthy a place in your Journal, you will oblige me by inserting them in the form in which they were originally written, at a time when I had an opportunity of ascertaining the actual state of most of the patients, by personal inspection.

Since my return to Europe, I have been made acquainted with cases of diabetes treated successfully by Dr Watt and others, by venesection, and means apparently opposite to what I have been accustomed to employ, with such striking success, in Ceylon; but as I have had no personal experience of the mode of treatment recommended by Dr Watt, I can only conclude with him "that in medicine there are different ways of accomplishing the same end."

Cheltenham, 25th April, 1811.

Columbo, September 1809.

Although I have not the honour of Dr Rollo's acquaintance, I had intended to send him these, and some other cases of diabetes, as a confirmation of his train of reasoning, and of the successful practice he had the merit of introducing in this formerly fatal disease; but as the subject has been casually introduced here, and I have reason to believe that diabetes occurs much more frequently with the inhabitants of this island than in Europe, I think a succinct account of all the cases of diabetes I have met with at Columbo will be acceptable to my readers, and particularly to those gentlemen who may have occasion to practise on Ceylon.

The first case of this disease I treated at Columbo, was in a native of rank, Don Louis de Saram, second maha moo-deliar under this government. He applied to me in the month of June 1804, after having laboured under diabetes for twelve months, and being much reduced in flesh and strength. He had a voracious appetite, with constant thirst; and his urine was in great quantity, yielding a great proportion of saccharine extract. He had also a burning sensation in his stomach; uneasiness in the region of the kidneys; heat in the soles of the feet and palms of the hands; a dry skin; loss of his venereal powers, but no phymosis; his pulse and bowels natural.

He was immediately put upon animal regimen, which I have reason to believe he observed religiously; and ordered hepatized ammonia, lime-water, and pills with digitalis and opium. In a few days his urine was reduced to the natural standard, but lost its saccharine taste and peculiar smell. His other symptoms also more gradually disappeared, and he rapidly recovered his strength and flesh. In three months, having perfectly recovered his health, having increased in weight about 21 lb, and being restored to all his functions, he was allowed to eat one meal of rice daily; and no relapse ensuing, he was soon afterwards permitted to return to his usual diet, which consists, in a great degree, of rice, fruit, and fish.

He has since occasionally applied to me in consequence of a slight increase of urine, which is easily removed, by resuming for a few days his animal diet, and taking a few pills, with a small proportion of digitalis and opium, which I have prescribed chiefly as a placebo, for the purpose of inducing him to persevere in his regimen. At the time of writing this note, September 1809, he enjoys excellent health; and although corpulent, is very active for a man of his age, which is now fifty-five.

My second patient, Don Juan Appoo, aged 49, a Cingalese, and physician by profession, had only had the disease seven months, but was still more reduced than my former patient. On the 12th of January 1805, when he first applied to me, his urine amounted to twelve pints; one pint of which yielded 2 oz. of saccharine extract, of the appearance and consistence of treacle. His emaciation was great, with a dry wrinkled skin, and sense of heat in the stomach, soles, and palms. His appetite various, with constant thirst, parched tongue, and costive bowels. Pulse quick and small. Phymosis, et coitus nullus. Weight 97 lb.

He commenced the animal regimen on the 13th, and was ordered half a drachm of kali sulphuratum, and a pint of lime-water daily. In this case the change in the quality of the urine was more gradual, and on the 25th it still yielded a little saccharine extract, when, in addition to the other medicines, he was ordered a grain of opium and digitalis, twice a-day. On the 5th February it only amounted to six pints, having a saline taste and smell, and yielding a little more animal extract than healthy urine. At this time also, all his symptoms had greatly diminished, and his appearance was much improved. On the 15th of March, all his symptoms having left him, and his weight being increased to 127 pounds, he was permitted to eat rice once a-day.

On the 16th of April, when he was desired to leave off medicine, I made the following report:—"My patient has persevered in the use of his pills and lime-water, and only eats of rice once a-day, when he consumes about one half measure, equal to one pound of the unboiled grain; at other times he eats animal food, of which he now uses more than two pounds daily. He has had no return of saccharine matter in his urine, which has a saline smell and taste, but yields rather more animal extract than healthy urine. It amounts to two or two and one-half quarts daily, and he thinks it generally increases somewhat every second day, when he bathes. He is now perfectly free from all complaint, has a healthy and robust appearance, and his skin soft, and flesh firm. His weight to-day is 136 pounds; being an increase of nine pounds since the 15th of March, and thirty-nine pounds since the 13th of January, when he commenced the animal regimen. This patient now returned to his usual diet, notwithstanding which his weight was found to have increased to 140 pounds on the 24th of June 1805; and he continued in perfect health till about the 20th of November 1806, when he was seized with febrile symptoms, succeeded by debility, sense of heat in his stomach, thirst, pain in his joints, and increased flow of urine, which on examination was found to contain saccharine matter. On

the 4th of December, he applied to me for these symptoms, when his weight also was found to have decreased to 124 pounds.

"On resuming the animal diet, and the use of the kali sulphuratum, his symptoms almost immediately left him; and in the middle of January 1807, he was again discharged, free from all complaint, his weight having increased to 137 pounds."

At the time of writing this note, he enjoys good health, although he looks more emaciated than in 1807; and says he has occasional increase of urine, when obliged to live very much on vegetable diet, which the state of his circumstances sometimes requires. This man used formerly to practise chiefly amongst small-pox patients, of which he has not seen a case for the last three years, and is in consequence obliged to keep a school as a means of subsistence. It is a remarkable coincidence, which I hope I shall be excused for mentioning, that Don Juan, who in all appearance owes his life to one of the modern improvements in medicine, has lost his usual means of subsistence by a still more important one. It will be anticipated, that I allude to Dr Jenner's great discovery of vaccination, which has been extended to upwards of 120,700 persons on this island, the inhabitants of which, previous to its diffusion, used to suffer dreadful ravages from small pox, which they now only know by name. *

My third diabetic patient, Cornelius Gomez, aged fifty, applied to me in 1805, but only persevered in the animal regimen for a few days, during which, however, his urine was diminished in quantity, when, getting tired of my prescriptions, he withdrew himself from my care, and went to a distance from Columbo. On inquiry, I learn that he is still living, and that he has occasionally resumed the animal diet with benefit, but being irregular in pursuing any plan, the symptoms of his disease have increased, with extreme emaciation and debility; and his appetite having failed, his native physicians do not expect him to survive long.

A fourth patient, Don Johannes, aged thirty-eight, placed himself under my care on the 12th of May 1805, when I made the following report in my notes: "At present, a thin spare man, but says, that until lately he was robust and lusty, and that he enjoyed good health till within these seven months, when his urine became increased in quantity; and for four months past, he has had an unnatural appetite. He now makes above six quarts of

* At the time these observations were written, the small-pox had not existed in any part of Ceylon for upwards of eighteen months. In the October following, the contagion was imported by a boat from Quiloa to Jaffnapatnam, but only affected a few individuals there who had not been vaccinated.—24th April 1811.

urine daily, which yields a considerable quantity of saccharine matter; and he eats about three measures of rice (six pounds of dry grain) in a day, which is three times the quantity he was accustomed to consume when in health. He complains of a sense of heat in his stomach, which is frequently distended with flatus; and also of a sensation of heat and creeping in his palms and soles. He likewise feels some uneasiness in the region of the kidneys. Belly regular; pulse eighty, and soft; tongue appears dry; and he complains of thirst. Skin is however soft; and he perspires as usual, on taking exercise. He says that two of his relations have died of this disease, and that he has taken a great deal of medicine from Cingalese physicians, without benefit.—Weight 106 pounds.

He was immediately put on the animal regimen, and ordered a solution of kali sulphuratum, with pills of opium and digitalis; and in three weeks his urine was of the natural appearance and quantity. On the 13th of June his symptoms were nearly all removed, his appearance greatly improved, and his weight somewhat increased. On this day he returned to his usual residence at Bentolle, thirty-six miles distant, with strict injunctions to persevere in his animal regimen and pills.

On the 6th of August he returned to me, complaining of his urine having again increased in quantity, with a saccharine taste; and upon being questioned, he allowed, that soon after he went home, he commenced eating a little rice twice a-day.

He was again put on the animal diet, which speedily removed his symptoms, and at the end of the month he returned a second time to Bentolle free from complaint, and increased in weight 13 lib. since he began the treatment. In passing Bentolle in the December following, this patient waited on me, with a present of fruit, when he assured me he continued well; but I have lately heard that he latterly took to dram-drinking, and is since dead. His relations assure me, that the disease which carried him off was dysentery, and that he had no return of sweet urine.

A fifth patient, a Portuguese priest, named Philippe Nera, aged 52, applied to me in July 1805, having been affected with slight symptoms of diabetes mellitus for about a year. As he was a man of information and strong mind, I explained to him my ideas of his case, or rather the reasoning of Dr Rollo, and the beneficial effects we had experienced here from the animal regimen, which he promised to pursue. As his symptoms, however, were slight, he did not confine himself entirely to animal food, but ate an increased proportion of it, from which he experienced great benefit. He was recalled to Goa before his case had

terminated; but his colleagues here inform me, that he now enjoys good health.

A sixth case occurred in Mrs Laurenty, aged 40, the wife of a Dutch surgeon, who attended the family of my first patient, and took notes of his case when under my treatment. She had at this time been affected with diabetes for several years, from which she was greatly reduced, and made daily above six quarts of straw-coloured sweet urine, which readily fermented. Amongst other symptoms, she had an intolerable sense of heat and itching at the meatus urinarius, attended with sterility, since the commencement of her complaints. As soon as the good effect of the animal regimen was evident with Don Louis de Saram, she was put on a similar course, and in a few months perfectly recovered her health. She has since had two children; and assures me that at the present time she is free from all complaint.

A seventh case was treated conjunctly by Dr High, staff surgeon at Columbo, and myself; and in this case we determined to trust entirely to animal diet, prescribing no medicine, but an emetic in the first instance, and afterwards castor oil, to keep his bowels regular. On the 12th of January 1806, when he first placed himself under our care, I find I made the following report.

"Don Simon, aged 48, was healthy and corpulent till within these eight months, when he was seized with cold shivering, and an attack of fever, followed by a great flow of urine, and other symptoms of diabetes. At present he is considerably emaciated, and complains of great debility, with an insufferable burning sensation in the region of the bladder, and in his palms and soles. He also complains of excessive thirst; and in the last twenty-four hours drank sixteen pints of water. His appetite was at first bad, but is now voracious; and he yesterday consumed 1½ measures, (3 lib.) of dry grain of rice, besides a proportion of biscuit, fruit, fish, and beef. He yesterday made about twenty pints of straw-coloured fermentable urine, which, when boiled, yielded about 5 lib. of extract like treacle. His belly is very costive, and he occasionally passes ascarides; pulse 100, and feeble; tongue appears moist, but he has been chewing betel; he sleeps badly, which he attributes to the burning sensation and general pains; his skin is rather hot, but moist; and he sweats on taking exercise. He is said to be a sober man, and not addicted to the use of arrack or toddy,* but was accustomed to drink milk and

* Toddy is the liquor which distils from the fruit-stalk or spadix of the cocoa

country sugar before his illness, and since has indulged much in cocoa-nut water. For the last eight months he has had a most complete phymosis, and total incapacity for venery, though previous to that period he exercised all his functions with vigour. Weight 107 lib."

Soon after commencing the animal regimen, his urine was reduced to nearly the natural standard and appearance; and all his symptoms gradually, but regularly, gave way. On the 12th of February, Dr High made the following report.

"Meat, 5 lb.
"Drink, 6 lb.
"Urine, 4½ lb.

"Says his urine has entirely lost its sweetness, and the extract from lbij. does not exceed an ounce, and though in appearance like treacle, has a saltish taste; heat in the palms and soles less; numbness, of which he has complained for the last twelve days, is also less troublesome; sleeps better, and gains strength, having for the last fortnight walked above three miles daily; appetite and thirst more natural; bowels still costive; the uneasiness about the back and belly much better; pulse 98; tongue and mouth appear natural; phymosis has almost entirely left him; weight 115 lib.; so that he has gained 8 lib. during the month."

The last regular report of him is on the 19th February, when he was still better and stronger than on the 12th; and towards the end of the month, he returned to his residence at Cultura, free from complaint.

This patient returned to Dr High on the 18th of May 1807, when he said he had remained well till March 1807, in which month his symptoms again returned, but with less violence. On

and other palms; the extremity of which is cut for that purpose, before the spatha or sheath containing the flower bursts. Earthen pots are fastened to receive the toddy, which is removed morning and evening. When first drawn, it is an innocent, not unpleasant beverage, resembling honey and water, with a peculiar smoky taste; but after being kept a few hours, it ferments, and becomes an intoxicating liquor. In this state, it is much drank by the soldiers, and many natives; and is also collected for the distillation of arrack, which is a principal article of export from Columbo and Galle. The cocoa-nut water, or milk, is the juice contained in the shell; and which, in a young, but full grown cocoa-nut, amounts to more than a pint, and is a pleasant cooling beverage, not unlike whey, but containing more saccharine matter. A Cingalese peasant, when he travels, generally carries two or three young cocoa-nuts with him, which often forms the whole of his refreshment during the day. He drinks the milk, and afterwards eats the young kernel, which is in the state of a soft sweet pulp, adhering to the shell; from which he scrapes it with his hand, or makes use of part of the shell or husk as a spoon.

resuming the animal diet, they again left him, and did not return till April 1809, when they were a third time removed by the same plan; and at present he enjoys good health.

An eighth patient, Pedro Silva Bernardo Chitty, aged 40, placed himself under my care on the 25th of January 1808, when he made daily upwards of seven pints of urine, yielding about 1 lib. of extract like treacle, and had all the other usual symptoms of diabetes. His weight was 114 lib. In this case, I also trusted entirely to animal diet, prescribing only as a placebo, pills composed of magnesia. His urine soon assumed the natural appearance; and on the 28th of February, he reported himself free from all complaint, although he was diminished in weight, being only 104 lib., which was probably owing to his eating little in consequence of his dislike to animal regimen, since the commencement of which, his bowels had also been remarkably open. On the 16th of March, having had no return of his symptoms, and a great dislike to the animal diet, he was allowed one meal of rice in the day. On the 8th of April, he continued well, and was permitted to resume his usual diet of rice, fish, and curry, and only prohibited from fruit and fresh vegetables. In May, his health being perfectly good, and his weight 130 lib., he was allowed to return to his usual mode of life; and on the 24th of June, when he left off attending me, I made the following note.

"Since last report, he has lived as usual, eating chiefly fish, rice, and vegetables, which he does in considerable quantity, and with good appetite. He has not had the smallest return of his diabetic symptoms, and appears robust, strong, and plethoric; his weight is now 137 lib., being an increase of 23 lib. since he began the animal regimen, and of 33 lib. since the 28th of February."

At the time of writing this note, I sent for this patient, who assured me that he enjoyed tolerable health; although, from misfortunes in life, he had been obliged to live frequently on a spare vegetable diet, which increased the quantity of his urine, and occasioned emaciation; but of these symptoms he was always free, when enabled to eat a meal or two of animal food daily.

While writing this note, my highly respected friend Dr High, who, as well as many of the other medical gentlemen at Columbo, has seen most of these patients, brought me a ninth case of diabetes; of which, in his presence, I made the following report.

"Ranma Poelly, a Chitty, aged 36,—11th September 1809,—Applied to Dr High on the 3d of September, for diabetes mellitus, which he had had for twelve months, and which had occa-

sioned great emaciation and debility. He at that time drank nearly nine pints daily, and made about thirteen pints of straw-coloured urine, which fermented, and when boiled yielded about 14oz. of saccharine extract like treacle. He had also considerable thirst, and a voracious appetite, pain in the kidneys, and some degree of phymosis. Belly costive. Weight on the 3d, 124½ lib. He has since the 3d restricted himself to animal diet, with the exception of 4 oz. of bread daily, and he feels himself much stronger, and is improved in appearance. Urine about 5½ pints, without any sweet taste, and yields comparatively very little extract, although it has not the strong ammoniacal smell of healthy urine. Thirst and pain in the kidneys gone; appetite natural; bowels more open; weight on the 9th was 126 lib.

I have seen two more cases of diabetes at Columbo, the one a Gentoo named Vera Pattren, aged 50, applied to me in 1806, when he was much reduced by the disease, which had, however, lasted only four months. On being informed that medicines would be of no use, unless he could conform to strict animal regimen, he declined placing himself under my care, alleging as an excuse, the injunctions of his religion; and the native doctor who attended him, informs me, that he died of the disease a month afterwards.

The last patient, named Johannes de Silva, is now ill at Columbo, and has once applied to me, but cannot summon resolution to submit to the animal regimen, and at present is taking Cingalese medicines; but says he will place himself under my care if he does not soon get better. He is sixty years of age, and very much reduced in strength and appearance, so that I have no great expectations of his ever enjoying good health, even should he adopt the animal diet.

The result of these cases so perfectly agrees with the observations and reasoning on diabetes mellitus contained in the excellent work of Dr Rollo, that it would be superfluous to add any remarks whatever to the simple statement of them, did it not appear necessary to mention some particulars as to the mode of living and habits of the people of this place, which may perhaps tend to account for the greater frequency of the complaint, and its more certainly and readily giving way to animal regimen, than could be expected in Europe.

In addition to the occurrence of so many cases of diabetes in my own practice, which with the Cingalese is very limited, I have the testimony of several native doctors, as to its being by no means an unfrequent disease with the inhabitants of this part of Ceylon; and from the circumstance of the natives of Hindostan living chiefly on rice and vegetables, some of the casts be-

ing entirely interdicted the use of animal food, I had conceived, that it must be equally frequent on the continent of India; but from my friend Dr William Hunter of Calcutta, who is well acquainted with the diseases, as well as with the literature and customs of the natives of Bengal, I learn, that although the diabetes mellitus is described in the books of both Hindoos and Muselmans, under a similar name as on Ceylon, he has never met with an instance of it at Calcutta, which convinces me that it is by no means so frequent in Bengal as on Ceylon; and I think a satisfactory reason may be found for this in the different articles which compose a great part of the food of the Cingalese.

The injunctions of the religious of Boudha, are by no means so severe as of that of Brahma, in the prohibition of animal food, since even the Boudha priests may eat of it, provided it has not been killed by them, or by their order; but this interdiction of not depriving any animal of life, is applicable to all the Boudhists of high cast; and in a certain degree the prejudice extends to the lower orders, and even to some of those who profess Christianity; besides which, meat, particularly mutton, is comparatively very scarce and dear at Columbo.

The bulk of the people, therefore, in the vicinity of Columbo, consume, I believe, less animal food than in most parts of India, and certainly far less grain, which, from the nature of the soil, and the state of cultivation round Columbo, is not produced in nearly sufficient quantity for the subsistence of the people. A considerable quantity of rice is imported from Bengal, and other parts of India; but the poorer orders have seldom the means of procuring much rice, and live a great deal upon yams and sweet potatoes, jack-fruit, plantains, or bananas, and particularly cocoanuts, which form a great part of the subsistence of the people in the corles, or districts, dependent on Columbo. These all furnish sugar ready formed, and in greater abundance than rice, besides which they use a great deal of country sugar or jaggery, prepared from the toddy of the rittiel palm (caryota urens), which is very cheap, and forms an article of export from this place.

As a strong corroboration of my opinion, that it is owing to the immoderate use of these articles, that the Cingalese are so subject to diabetes, it ought to be mentioned, that during nine years, in which I have received the hospital returns of all the European and native troops on Ceylon, not a single case of diabetes has occurred amongst them, although the number of men has in general been about 7000, and that of sick has been on an average upwards of 500. The Europeans have beef served out

to them daily; and the natives receive a liberal allowance of rice, on which they chiefly live.

If it should be allowed, that the natives of Ceylon are more exposed to attacks of diabetes in consequence of their using little animal food, and subsisting chiefly on articles furnishing a great deal of sugar, it will readily be understood, on the general principle, that the system is acted on most powerfully by those causes to which it is least accustomed; that the abstraction of all articles of diet which contain sugar, or from which it is likely to be formed, with the substitution of an animal regimen, will be more likely to produce an immediate change on the state of the urine and digestive powers, than with Europeans who have been accustomed to a more considerable proportion of animal food in their ordinary diet.

Few of the people of Ceylon who are plain and simple in their general mode of life, are ever disposed to indulge much in the luxury of the table; so that unless it interferes with their religious principles, or with the state of their circumstances, a change of diet is with them a subject of little consideration; and on that account I have found less difficulty in prevailing on them to comply strictly with my injunctions, which in general went to the entire prohibition of every thing but animal food of different kinds, dressed with ghee, or clarified butter, and water, with or without the addition of a little brandy.

It ought to be remarked, that in all my patients there was an increased appetite. Had they been in that advanced stage of diabetes in which the appetite fails, it might have been dangerous to abstract so suddenly all their accustomed articles of food, and advisable only to adopt the animal regimen gradually or partially.

In some of the cases it is noted, that the quantity of urine was increased on the days the patient bathed, and in others, that the quantity of urine exceeded that of liquid drunk; from which it might be conceived, that I was of opinion that absorption of fluid takes place from the skin in this disease; and it is therefore necessary to remark, that I have had no distinct proof of this; for the quantity of water contained in the articles of food, particularly boiled rice, was much more than would account for the excess in the quantity of urine above that of liquid drunk; and the variation of quantity on the days of bathing was so slight, that in all probability it might be owing to other causes.

The partiality of the Indians to frequent ablutions is well known, and I generally permitted them to bathe as usual during the whole course of treatment, by which indulgence I more readily procur-

ed their observance of my other directions; and by keeping the skin soft and clean, I rather thought it promoted the cure. It was performed, as is usual with the natives, by standing up to the breast in a pool of fresh water, and pouring it repeatedly over the head; but as the water is generally above the temperature of 80 of Fahrenheit, it cannot be considered in the same light as the cold bath or affusion in Europe.

It is probably owing to the frequent use of the bath amongst the natives, that I have less frequently met with dry wrinkled skin, or phymosis, than I had been led to expect from the perusal of the cases collected by Doctor Rollo. *

I have been at some pains to learn what is said in the Cingalese books† of the diabetes mellitus, or *madu mehé* (honey urine) as it is there called; and, with the assistance of my friend and relation Mr William Tolfrey, who is well acquainted with the language, I procured the following translation, or rather abridgement, from the *Yoga Ratnakére*, or collection of valuable prescriptions, a book written in Cingalese verse, and said to be translated from the Sanscrit by Monara Gamuwa Unnanse, who lived in the 16th year of Bowenaka Bahu, king of Ceylon, who reigned upwards of 300 years ago, and previous to the settlement of the Portuguese in the island.

As many of the words are derived from the Sanscrit and Pali, the learned language of this island, Mr Tolfrey cannot be answerable for the correctness of it in every respect; but I shall subjoin it here, as a curious specimen of what kind of information may be procured from the Cingalese medical books, which in many respects will, I conceive, be thought to resemble the dogmas and subtilties of the Galenic school.

The *pra mehé*, or diseased flow of urine, is divided into twenty species, of which ten proceed from phlegm, and are easily cured, six from bile, which may also be cured with care, and four from wind, which last are incurable.

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* The warm and uniform temperature at Columbo, where Fahrenheit's thermometer rarely sinks below 70, or rises above 86, may have contributed essentially to the favourable termination of the cases of diabetes treated there. Might not an artificial temperature, which has of late been successfully used in Great Britain in pulmonary complaints, be also employed with advantage in diabetes? 24th April 1811.

† My attention was first directed to those on the subject of diabetes by my second patient Don Juan, who said he was well acquainted with his own disease, which was described in the Cingalese books, under the name of madu mehé, as an incurable disorder, and that his own experience confirmed this opinion; for that, although he had often seen the disease, he had never known any person recover from it, except Don Louis de Saram, my first patient.

The ten species proceeding from phlegm are,

1*st*, Udaka mehé.—*Udaka* in Sanscrit and Pali signifies water, and the symptoms are a flow of very clear urine, cold, without smell, like water, and discharged without pain, with a little slime.

2*d*, Ikshu mehé.—*Ikshu* Sanscrit and *utchu* Pali, means the juice of the sugar cane; and the symptoms are slimy cold urine, like that juice.

3*d*, Sura mehé.—*Sura* in Sanscrit and Pali, signifies toddy; * and in this the urine resembles toddy, and on being kept deposits a similar sediment.

4*th*, Sandra mehé.—*Sandra* in Sanscrit signifies thickness; and in it the urine, after being allowed to stand a night, is thick.

5*th*, Pishta mehé.—*Pishta* Sanscrit, *pitha* Pali, signifies flour; and in this species the urine, after standing a night, deposits a sediment white as flour, and of very little weight. Another symptom is, that when the urine is passed, the hair of the body stands on end from pain.

6*th*, Sukra mehé.—*Sukra* Sanscrit, *suka* Pali, signifies semen; and in this the urine is discharged with a mixture of semen, which it resembles in colour.

7*th*, Saikta mehé.—*Saikta* Sanscrit, *sikata* Pali, signifies sand; and in this species small round particles of phlegm are discharged with the urine, resembling sand.

8*th*, Sita mehé.—*Sita* in Sanscrit, Pali, and Cingalese, signifies cold; and the symptoms of this species are extremely cold and very sweet urine.

9*th*, Samairima mehé.—*Samairima* in Sanscrit signifies drop by drop; and the symptom is the urine being passed drop by drop.

10*th*, Alala mehé.—*Alala* Sanscrit, *lala* Pali, signifies saliva; and the symptoms are urine mixed with particles of phlegm, in the shape of small threads, and slimy like saliva.

The six species proceeding from bile are,

1*st*, Manjesta mehé.—*Manjesta* Sanscrit, *manjutta* Pali, is the name of a red seed; and the urine in this species is of a reddish colour, and has a fishy smell.

2*d*, Rakta mehé.—*Rakta* Sanscrit, *ratha* Pali, signifies blood;

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* For an explanation of the word toddy, see note, p. 290. The urine of diabetic patients in the climate of Ceylon never fails to ferment on being kept a night; and in this state it bears a striking resemblance to toddy, which has undergone a slight degree of fermentation.

and the urine in this species is of the colour of blood, feels hot, tastes salt, and has a fishy smell.

3*d*, Nila mehé.—*Nila* in Sanscrit and Pali, signifies blue; and in this species the urine is of a bluish colour.

4*th*, Hariddra mehé.—*Hariddra* Sanscrit, *halliddy* Pali, signifies yellow; and in this species the urine is of a yellow colour, of a sharp taste, and discharged with heat.

5*th*, Rala mehé.—*Rala* in Sanscrit and Pali, signifies black; and the urine in this species is of a sooty colour.

6*th*, Kshara mehé.—*Kshara* Sanscrit, *kara* Pali, signifies saltish; and in this species the urine is to the smell, taste, and touch, like sea water.

The four species proceeding from wind are,

1*st*, Wasa mehé.—*Wasa* in Sanscrit and Pali, signifies fat; and in this species the urine is discharged frequently, either mixed with fat, or entirely composed of an unctuous substance.

2*d*, Mudja mehé.—*Mudja* Sanscrit, *minja* Pali, signifies marrow; and in this species the urine is discharged frequently, and resembles marrow, or is mixed with that substance.

3*d*, Hasta mehé.—*Hasta* Sanscrit, *hutty* Pali, signifies elephant. The urine in this species is discharged frequently, and with difficulty, resembling the semen of a ruttish elephant, or the liquor of the joints.

4*th*, Madu mehé.—*Madu* in Sanscrit and Pali, signifies honey; and in this last species the urine is of the colour and taste of honey.

In the *Bayajja Manjussy*, or Medicine Chest, another work more lately translated from the Pali, the same account is given of the different species of *mehé*; and it is said they are occasioned, amongst other causes, by whatever produces much fat urine or phlegm, as indolence, eating cold and sweet things, and food of a watery nature. The more immediate causes of the *madu mehé*, are either decrease of the substance of the body, and excess of wind, or the wind's being obstructed and mixed with the blood, on which account it is incurable. The distinguishing symptoms of the four species of *mehé* proceeding from wind, are flatulence and eructation, tightness of the chest, tremor, pains, restlessness, emaciation, and difficulty of breathing.

The only remedy recommended for *madu mehé*, is pills composed of seventeen ingredients, amongst which are the following: Sulphur, nitre, borax, sal ammoniac, yellow arsenic, cinnabar, capsicum, black pepper, and several other vegetables with which I am unacquainted.

Although the above division and distinctions of the *pra mehé*, which seems to include all the diseases of the urine, is ar-

bitrary, and often fanciful; yet it is a curious circumstance, that the Indian physicians should have described so distinctly the sweetness of the urine in *madu meh*é, which had escaped the observation of both the ancient and modern physicians of Europe till the time of Willis.

VIII.

Cases of Tic Douloureux cured by Arsenic: Tumors of the Tongue cured by Mercury; Recovery from an excessive Dose of Laudanum, and Observations on Herpes of the Prepuce. By Robert M'Kechnie, Surgeon, Paisley, and Member of the College of Physicians and Surgeons, Glasgow.

The following papers are sent for insertion in the next Number of the Journal, if they are deemed worthy of a place. The case of tic douloureux I have hitherto refrained from communicating, because it is well known that this disease often returns, after an apparent cure has been effected; and in the present instance I had frequently seen my patient relapse. But so long time has now passed, during which he has enjoyed as good health as any man of his years, that I hope I am warranted in viewing the cure as permanent. As I am not satisfied respecting the nature of the disease, I will not presume to make any observations upon the modus operandi of the treatment. I am convinced that in this case the affection was not connected with debility, "constituting the precise circumstances in which arsenical remedies have proved salutary," as Mr Hill alleges; nor have I any reason to believe that it was a consequence of irregular action of the digestive organs, as Mr Abernethy surmises. At the different accessions of the disease, the bowels were frequently and freely purged with calomel and jalap; but I did not perceive any mitigation of symptoms from their use. The case of tumors in the tongue greatly resembles one published in the Second Volume of this Journal, which was cured by calomel and cicuta, continued for ten weeks, after the cicuta had failed by itself. Doubts, however, may arise in the minds of those who believe in the virtues of cicuta, whether the cure ought entirely to be ascribed to the mercury. No diminution of the tumors in

Mrs L.'s tongue took place till the ptyalism began. The success of the treatment of this case and that of tic douloureux by medicine, shows the progress which is making in what may be called medical surgery; for, though we have a remedy at hand for tic douloureux, in cutting the affected nerve, and another in extirpation for tumors in the tongue, the irritability of which has been proved by the successful results of Dr Inglis's cases to have been much overrated, if a disease can be cured in the same time by medicine as by an operation, no comparison will be made between the two methods of treatment. The case of recovery from the rash use of laudanum, I am induced to publish, because I think it shows that we ought not to rest satisfied with fully evacuating the stomach after a vegetable poison has been swallowed. Though I saw the patient soon after the accident, and as expeditiously as possible emptied the stomach, the deleterious effects of the baneful drug still operated to such a degree, that, I verily believe, had the subsequent treatment not been adopted, she would have perished. A case of an excessive quantity of laudanum being swallowed is inserted by Dr Marcet in the First Volume of the Medico-Chirurgical Transactions. It would seem, from the little impression which such an enormous dose made upon the stomach or constitution, after remaining above six hours in the body, that the young man had been accustomed to use opium, or that the liquid drank was not prepared of the usual strength. The quantity swallowed by A. J. was much less than that by Dr Marcet's patient: yet the symptoms were equally alarming in a less space of time, and even after full vomiting had been excited. The observations upon Herpes of the prepuce, were suggested by the brief, but accurate remarks, of the reporter of the Public Dispensary, near Carey-Street, in the last number of this Journal.

Paisley, 15th May 1811.

Case of Tic Douloureux cured by Arsenic.

1st October 1807.—I was called to J. M. a merchant-tailor, aged 57, of a healthy constitution. He complained of a violent intermitting pain in the inferior jaw, beneath the right commissure of the mouth; a similar pain was also frequently felt in the right cheek, and under the right ear. He had been more or less subject for several years to these pains, which began beneath the ear, and afterwards became equally acute in the lower jaw, from which he had a carious tooth extracted, under a persuasion that it was the cause of his suffering. The attacks did not return periodically, nor did the seasons appear to influence their recurrence; for they were as frequent and severe in summer as in

winter. The first time I saw the patient in this ailment was on the 16th July 1804, when he laboured under an inveterate relapse. I applied vesicatories both to the jaw and to the neck beneath the ear, and kept the ulcers discharging with issue ointment.

By this treatment, and purging with calomel and jalap, the fits were moderated, but soon returned with increased violence. On the 8th August a course of pills, composed of cicuta and corrosive sublimate was prescribed; and, to hasten the effects of the mercury, camphorated mercurial ointment was ordered to be rubbed into the jaw. Salivation was speedily effected, and kept up about eight weeks, without producing any amelioration of the patient's condition. The pains gradually decreased after the mercury was given over, and at last ceased altogether. Though slight twitches were often felt after this, no violent invasion took place till April 1806, when he again became exceedingly afflicted. The most intolerable pain which he endured in that attack was in the cheek, but the throes were now and then equally pungent in the other places. He said he was conscious that in his last illness he had obtained more relief from the blisters than from any other thing, and wished them to be repeated; this was done, but without interrupting the paroxysms. Leeches were next had recourse to, and the pains were mitigated, either by the loss of blood, or by the hot wet cloths which were applied to promote the bleeding. Finding so much relief from the first application of the leeches, he was induced frequently to repeat them in the same manner when he was threatened with a paroxysm. At last, however, they lost their salutary influence, and he then tried the use of opium internally, and of sulphuric æther externally, to no purpose. The present attack began, without any known cause, about a week before I was consulted: when I arrived, my patient informed me his agony had been more insufferable than at any former period. The pains were most troublesome by day, seldom or never disturbing him by night. The excruciating paroxysms were excited by the slightest irritation; as by a breath of cold air blowing upon the face; by attempting to chew, or to speak abruptly, and sometimes even without provocation. At these times the pain suddenly darted into the lower jaw, and from that into the cheek, and beneath the ear. Each exacerbation consisted of a great number of short paroxysms, which lasted about half a minute, then remitted, returned immediately, again remitted, and so alternately, generally for the space of an hour. The exacerbations were not constant in degree or in duration. They sometimes caused violent contortions of the face, most ease being found by twisting the mouth to the left side, so as to stretch the muscles of the affected places,

and by rubbing the skin towards his mouth with his fingers; relief was sometimes procured by pressing firmly over the infra-maxillary foramen. When the anguish was greatest, the face flushed, and tears gushed from his eyes; but no change in the appearance of the parts affected could be discovered. To describe the kind of pain which the miserable sufferer endured is impossible; he himself said at one time, it was as if something was piercing or screwing into the flesh; at another, as if it was tearing or twisting from the bone. When the paroxysms ceased, he enjoyed perfect immunity of pain, till the morbid action was again excited. The general health was not impaired; the pulse was of the usual standard; the appetite was good; the bowels were regular.

Though my patient had at this time the most excruciating pain in the lower jaw, yet, as he was positive the first sensations of this disease were felt in the distribution of the portio dura of the right auditory nerve, and as sometimes very acute pain was endured where the superior maxillary nerve issued from the infra-orbitary foramen, I considered it a hopeless experiment to cut the inferior maxillary nerve. As I was entirely ignorant of the nature of this affection, I looked upon every thing that could be done for it as empirical; and as, in the present case, many of the most active remedies had been employed by myself and others, in preceding attacks, without permanent advantage, I thought myself justified in making a trial of arsenic, which had been recommended for tic douloureux by high authority. I therefore prescribed the following mixture.

℞ Sol. min. arsen.
Aq. pur. a ℥i.

Of this the patient was desired to take fifteen drops in a basin of gruel, three times a-day, and to add one drop every day till sensible signs of the operation of the medicine should be observed. For a few days there was no alleviation; but as the dose was increased, the paroxysms became less frequent, and more tolerable. On the 15th, the pains were completely gone; but to prevent a relapse, I thought proper to persist in using the mixture. On the 17th, violent pain seized the stomach; the pulse was strong, and the thirst was intense. Blood was abstracted; castor-oil was prescribed, and copious draughts of demulcent drinks were recommended. The medicine was also intermitted; but in a short time the patient was so much recovered, that it was resumed in small doses. It was continued a fortnight longer, without return of the original complaint, or of suffering from the remedy.

14th May 1811.—The painful affection of the face has never returned since the arsenical solution was desisted from; and the general health has been in every respect good.

Case of Tumors in the Tongue cured by Mercury.

7th February 1811.—Mrs L., aged 47, was admitted a patient of the Dispensary, for several tumors in the tongue. She had born a numerous family, and still menstruated regularly; but her general health had often suffered from abortions and profuse floodings. She had been subject to no local complaint till five years ago, when, in the last months of pregnancy, she was troubled with an eruption upon the nose, which was removed by rubbing it with what a quack called black mercury. After she was delivered, she was afflicted with an extensive inflammation in the throat, which was cured by frequently applying some liquid to the parts, by means of a sponge. About two years and a half ago, without any known cause, the tongue became very painful, and swelled to such a magnitude, that she could neither speak distinctly, nor swallow food, unless it were liquid. On this account, she rubbed the throat from ear to ear with an irritating ointment, which produced an eruption of pimples beneath the jaw. The swelling dissolved in the course of six weeks; and she then discovered several small knots in the substance of the tongue, round the edge of its anterior portion. She applied to her former adviser; but deriving no benefit from him, she consulted another itinerant, who gave her pills, composed, as she understood, of mercury. She took one three times a-day for several weeks, without her mouth becoming affected. At first, she thought the tumors diminished; afterwards, they remained stationary, and she desisted from the use of the pills. Nothing else was done till she put herself under my care, when she gave me the above history, and assured me the tumors were regularly increasing in size. They occupied almost the whole anterior portion of the tongue; and on the left side, a large one extended far beyond where this organ is bound down to the jaw. They were so deeply seated in its substance, and so firmly adhered to it, that it was impossible to say whether they were nearest the superior or the inferior surface. The patient informed me, small ulcers sometimes formed in different parts of the tumors, and soon healed; but no cicatrices of such ulcers were observable. The tumors were irregular in their surface, having various depressions and elevations; and were as hard and unyielding as scirrhus. Though that on the left side was the largest, they were all equally painful, and troubled her much in manducation. She said, the pain which she felt was as if a spear were thrust

from the tumors into the inferior jaw. The rest of the tongue was as soft and moist as usual, though the whole upper surface was covered with wide chaps: the sense of taste was natural.

My patient had suffered so much pain and inconvenience from these tumors, which she was convinced were rapidly enlarging, that she was alarmed about the consequences, and offered to submit to their extirpation. After reflecting, however, upon the history and present symptoms of the case, I could not reconcile myself to such a formidable operation as the removal of half of the tongue, which would have been requisite in order to eradicate the disease. She exhibited no signs of carcinomatous affection, or of suffering from the irritation of the tumors; her general health was better than it had been when she was younger; the sublingual and maxillary glands were not enlarged; and the spontaneous healing of the little ulcers, which occasionally formed on the surface of the tumors, indicated that they were not of a malignant character. From these reasons, I thought some milder remedy than extirpation ought first to be tried; and with this view, showed the case to my friend Mr Kerr. He concurred in opinion with me, and the use of arsenic was talked of; but it was judged expedient to defer it till the full operation of mercury should be seen, especially as Mr Kerr had formerly cured a case of the same kind in a child with this medicine, and as the patient was persuaded she had formerly been relieved by it. A blue pill was prescribed morning and evening, and afterwards three times a-day, but without effecting any reduction of the tumors. They moved the bowels; but neither salivated, nor made the mouth sore. Mercurial friction into the thigh was therefore joined to the pills, to the extent of half a drachm of ointment twice a-day. In a short time, the mouth became very sore; the mouth and face swelled enormously; and the ptyalism was profuse. The medicine was desisted from; and astringent gargles, with laxatives, destroyed the effects of the mercury. On the 19th March, no tumor or hardness could be detected in any part of the tongue; the pains were also entirely gone. As the deep chaps, with the elevated edges, continued, a few pills were repeated in April, but had no impression upon them. 14th May 1811.—The tongue is soft and free from pain; the fissures on its upper surface remain unchanged.

As it has been hinted to me, that the above tumors might have been of a syphilitic nature, I think it proper to add, that the patient is of a respectable moral character; as is also her husband. She has been long accustomed to smoke tobacco; but never had any affection of the mouth or throat, till the time mentioned.

Case of Recovery from an excessive Dose of Laudanum.

I was hurriedly called at five o'clock P. M. of the 23d April last, to visit A. S., an unmarried woman, aged 28, who had, in a fit of passion, determined upon self-destruction, and, for this purpose, had swallowed above an ounce of laudanum, which she purchased at two different shops, to prevent detection. She soon became alarmed, and informed her friends of what she had done; so that I saw her within an hour after the liquid was taken. When I entered, she was sitting supported in bed; her eyes were wild and staring; the face was flushed; the skin hot; the pulse, when it could be reckoned, 126; and the voluntary muscles strongly convulsed. Her mind was in a state of great confusion; at one moment, she was sensible of her crime, called for assistance; at another, she resisted the means used to save her. The violent action of the muscles occasionally relapsed; and was alternated by slight subsultus. No intimation of the nature of the case being given by the person who came for me, I had no medicines provided; I therefore endeavoured to excite vomiting, by tickling the fauces with some feathers, which she bit through. The mouth was then gagged, and the same attempt repeated without success. As I had often heard of vegetable acids being used to counteract the deleterious effects of laudanum, I poured down a quantity of vinegar. I soon after procured a solution of a scruple of tartar emetic, which the patient was made to swallow; but as it did not act in fifteen minutes, she got two drachms of white vitriol in solution, which operated powerfully. Whether the smell of the laudanum was concealed by that of the vinegar, or whether it had passed the stomach, I know not; but, in the liquids rejected, none was detected. The vomiting was encouraged by warm water for a considerable time. Pain being complained of in the abdomen, a large emollient glyster was administered with much difficulty, from a contraction of the sphincter, and only a few small scybalæ were voided; a second was exhibited with more ease, but came away with little feculent matter; and a third, which was attempted late at night, could not be retained, from relaxation of the sphincter. At eight o'clock, the increased action of the system abated, and the delirium was succeeded by languor and indifference. The thirst was intense; but the stomach was so irritable, that it instantly rejected whatever was taken. A large vesicatory was applied to the region of the stomach, and the patient was ordered out of bed. At eleven o'clock, the lethargy had increased so much, that it required the utmost exertions to keep her awake; the pulse was 55; the breathing laborious; the

countenanee dark and ghastly; the eyes sunk, and often shut; the muscles flaccid; the extremities coldish. No inconvenience was felt from the blister. Though the thirst was still excessive, and she always called for drink when aroused, the stupor was so great, that she sometimes fell asleep with the basin at her lips. Sinapisms were put round both legs; two scruples of calomel, mixed with sugar, were given; diluents, soured with lemon-juice, were recommended in small quantities at once, till the vomiting, which recurred when large draughts were taken, should cease; a large dose of castor oil was directed to be then given. As the great relaxation of the muscles required a person at each shoulder to drag her from place to place, and even to support her in her seat, the attendants were permitted to use every expedient they could devise for preserving her in activity.

On visiting at eight o'clock next morning, I learned that the castor oil had not been given till five o'clock, on account of the continuance of the retching; that the bowels were soon after freely emptied; that the feces were at first firm; of a feculent odour, and of a brown colour; afterwards liquid: that the drowsy state at the same time gradually subsided, when she felt acutely from the sinapisms, which were accordingly removed, and were observed to have produced partial vesications. The plaster remained upon the region of the stomach, and caused much pain. The pulse was 70, soft and full; tongue clean; thirst great; no appetite; skin hot and dry; urine natural. She requested leave to sleep, which was granted, after the vesications were dressed with irritating ointment, to prevent her rest being too long. In the evening she complained of an acute pain in the lumbar region, and was in a profuse perspiration, which came on in the afternoon, after a sleep of two hours. She was ordered to support the back with a flannel bandage, and to avoid interrupting the perspiration.

25th.—She had slept soundly, and said she felt herself comfortable and free from pain in her back; the perspiration continued; the pulse was 70, rather feeble; the thirst was abated; the bowels were easy; no appetite. In the evening she was languid, her breathing was oppressed, her countenance was heavy, the perspiration was still profuse, and the thirst considerable. She had walked through the house, and her mind had been agitated by some reflections that were expressed respecting her conduct. She complained of debility and of pain in the abdomen. An ounce of castor oil was ordered, and a little warm brandy toddy occasionally.

26th.—She slept a short time during the night without refreshment. Pulse 80; tongue foul, with great thirst; no appetite;

bowels freely evacuated by means of the oil; urine natural; pain of abdomen gone; much languor and lassitude. She complained of pain over the sternum on coughing. The ulcers on the legs were healed, that on the abdomen was ordered to be kept open. She was prohibited from rising out of bed.

27th.—She slept tolerably well, but in the morning felt weak, and looked stupid. Pulse low and feeble; tongue foul; no appetite; bowels lax; urine natural; skin temperate. The brandy was discontinued, and the following mixture substituted—

℞ Æth. sulp.
Tinct. aromat.
Syr. simp. ā ℥ss.
Aq. pur. ℥iiss m. cap. cochl. mag. 2da q. h.

28th.—She was improved in strength by a good night's rest, and took some breakfast. Pulse 60; thirst gone; bowels costive; the pain at the sternum returned, so that a blister was ordered to be applied in the evening. The mixture, which had been used irregularly, was desired to be continued.

15th May.—The pain of the chest was removed by the blister; the appetite improved, and she gradually increased in strength till the 2d inst. She then left town by my advice, and walked to a distance of eight miles, where she was not exposed to the causes which excited the rash action, and which still existed. By this removal, I understand, her mind, which was at the time in a state of imbecility, has recovered its former vigour.

Observations upon Herpes of the Prepuce.

Herpes of the prepuce is a disease trifling in itself, but of importance from the possibility of its being confounded with a much worse malady. That it is a disease of frequent occurrence I am persuaded, from the numerous cases I have met with; and that it has not attracted universal attention I am convinced, from various gentlemen having consulted me for this eruption, and having assured me they had formerly been put under mercury, from appearances precisely similar, in consequence of a belief that their symptoms had been venereal. I once knew a young gentleman undergo a severe course of mercury for what was called a cluster of obstinate small chancres, which only healed when the medicine was laid aside, by bathing the parts with a weak saturnine solution. I was lately consulted by a gentleman who had a cluster at the root of the prepuce, near its junction with the glans; he had a slight knowledge of medicine; and when I gave him my opinion that his complaint was not venereal, he was

dissatisfied. He immediately, of his own accord, applied a quantity of calomel to the part affected, and rubbed mercurial ointment into the thigh. By this treatment the small vesicles burst, and afterwards united into one large ash-coloured sloughy sore, exactly like a bad chancre. He was then certain he had an inveterate pox, and rubbed with all diligence to prevent constitutional contamination. He persisted in this practice for three weeks, when he rather cooled, as he saw his sore rather spread than contracted by the use of the calomel. He was now, therefore, induced to wash it off with milk and water, and to desist from the abuse of mercury. The ulcer soon healed by mild treatment, and by keeping the parts clean.

To prevent, as far as I am able, the recurrence of such maltreatment, from the imprudence of the patient, or the inattention of the practitioner, I hope I shall be excused for communicating briefly the result of my observation upon this subject.

My attention was first turned to herpes upon the prepuce, by an intimate friend showing me it, when he was conscious he had been engaged in no sexual intercourse, pure or impure. I have since frequently seen it in all its stages, and under the same circumstances, in the same person; for he has been liable to a return two or three times annually, for a series of years. He has of late become careless about it, and generally uses no means to remove it, because he suffers little pain, unless the vesicles break, and the urine irritates the sores, at which time he is led to bathe the parts with a drying lotion. In a case like this, the patient is exposed to no risk; for being sensible he has no occasion for a mercurial course, he will not submit to one; but a medical practitioner may have his judgment called in question, by hinting that the venereal disease has been contracted, when perhaps the crime which leads to it is abhorrent to the patient's dispositions.

Herpes upon the prepuce begins with a tingling burning sensation in a part of that covering. In a day or two a cluster of very small distinct vesicles is perceived, with a redness of a florid colour in the intervals, and surrounding the whole. If proper treatment be pursued the disease is repelled; if nothing be done to cure or to irritate, the vesicles increase a little in size, and become opake in four or five days, when the inflammation increases, and is followed by a constant disagreeable itching; in two or three days more, the pustules which have become confluent, are converted into a scab, which drops off in a few days. So far as my experience extends, it is never preceded or attended with constitutional symptoms, as herpes zoster is.

Till lately, I thought, as all the cases of this disease which had

come under my observation were situated within the prepuce, and happened only in those whose prepuce covered the glands, that it arose from the mucus there secreted becoming acrimonious, by inattention to cleanliness. I am now satisfied that this, if ever, is not always the cause; for at the time I received the last Number of this Journal, my friend had a well-defined attack of it on the outside of the prepuce. The cluster was of an oval shape, and consisted of eight vesicles, which, as he did not interrupt their progress, became pustular, scabbed, and dropped off within a fortnight, leaving the cuticle beneath of a faded red colour.

It is in the stage of vesicle that the patient is most apt to become alarmed, and by his conduct to change the character of this eruption so as to deceive his medical adviser. He feels an unpleasant sensation after an improper connexion; he examines the part, and on detecting a number of blisters, he becomes uneasy; from modesty he is at first averse to disclose his situation; he looks frequently at the seat of the affection; he sometimes bathes it with the urine as it flows, and afterwards wipes it. By this treatment the tops of the vesicles are broken, and little sores are formed, which he shows to a practitioner, who, not aware that such a variety of herpes as this exists, joins in the patient's fears, and at once prescribes a course of mercury. This more readily happens if the patient has rashly used any corroding application. If, however, the diagnostic symptoms of herpes upon the prepuce and of chancres were adverted to, the patient's mind might be relieved from that anxiety which is common after every suspicious intercourse; for herpes does not resemble syphilis at its commencement so much as it imitates it, when acrid substances have been employed to destroy its imaginary virulence. In herpes, the inflamed surface is of a florid colour; the eruption is gregarious; the edges of the sores are smooth and regular, and their bottoms clean. In syphilis the inflammation is of a copper colour; only one sore usually appears in one place; the edges of chancres are thick and ragged, and their bottoms sloughy. In herpes also the vesicles and subsequent sores are much smaller than in chancres.

The treatment of herpes upon the prepuce, which I have found most successful, either before or after the vesicles burst, is bathing the part frequently with a weak saturnine lotion, and defending it from the acrimony of the urine. If it be within or upon the edge of the prepuce, by gently touching it with simple cerate. If the disease be situated on the outside of the prepuce, I would advise the penis to be surrounded with a cloth kept constantly moist with the above solution. The patient should be

prohibited from increasing the complaint by irregularity of conduct, and from fretting the parts by his anxious examinations.

IX.

Case of Diabetes treated by Blood-letting. Communicated by Mr Samuel M'Keur, Surgeon, Castle-Douglas, to Dr Charles Anderson, Leith.

John M'Kinnel, ætat. 36, labourer. *November 15th.*—Is affected with occasional pains in the stomach and bowels; is generally costive; his stools are voided with difficulty and pain; are of a white colour, and frequently tinged with blood; has always considerable thirst, and discharges a much greater quantity of urine than in health; has frequently observed that his urine in the forenoon is of a yellow colour and salt taste, and that in the afternoon it is more transparent and very sweet; has a sense of oppression in the chest, accompanied with palpitation of the heart; is sometimes troubled with nausea, and has always a very bad taste in his mouth; his tongue is covered with a brownish fur; the greater part of the teeth are fallen out, those that remain are quite loose; his gums are very tender and spongy; his skin is dry and rough, but is not hide-bound; is very much emaciated; very weak, and although his wife is at present pregnant, considers his powers of virility a good deal impaired; is rather depressed in spirits, and says he finds greater difficulty of fixing his attention on any subject than when in health; pulse about 100, regular in frequency, but very irregular in strength; and on the whole very feeble. Weight 7 stone 2 lib.; his legs are considerably œdematous; takes nearly, on the whole, the same quantity of food as in health.

These complaints commenced about two years ago with thirst, pain in the loins and epigastric region. For a year and a half he has observed very little variation in the symptoms, excepting the increase of debility; is reported when in health to have been fond of ardent spirits.

Has used a variety of medicines without any good effect. Animal food agrees well with him; but although he lived for some time almost exclusively on it, no sensible amelioration of his case could be observed.

Was about two months ago a good deal troubled with vertigo, which was relieved by bleeding.

November 16th.—Pulse 100, so feeble as to be with difficulty numbered; much oppression in the chest. ℥viii. of blood were taken from his arm, being all that could be procured; veins so relaxed and empty that it is with difficulty any of them can be opened; pulse not altered by the bleeding; but feels a good deal relieved in the chest; laxative pills *pro re nata.*

17th.—Pulse scarcely to be felt; veins cannot be made tense by ligature; ℥viii. of blood again procured with much difficulty; the energy of the heart seems almost gone; no alteration from the bleeding; the blood taken yesterday covered with a thin blue film; the substance of it very loose, and black in the bottom; serum exceedingly white. A large blister to be applied over both kidneys.

18th.—Blister rose well, but discharges little; other symptoms as before. Urine about xx lib. in the 24 hours; ℥x. of blood again taken; no sensible effect from it; blood taken yesterday of the same appearance as before.

19th.—Pulse 104, more regular, and somewhat fuller; blister *now* runs well; ℥xii. of blood taken; *now* for the first time it runs in a full stream; felt relief while flowing; pulse rather improved by bleeding.

20th.—Blood taken yesterday firmer in texture than any formerly, and contracts more on the surface, with a thicker buffy covering; pulse as yesterday; ℥xii. of blood again taken; veins now fill better, and the blood flows more forcibly.

21st.—Pulse about 100, considerably firmer; ℥xvi. of blood taken; much relief while flowing; pulse not altered; lime-water ordered.

22d.—Pulse 120, but quite distinct; feels very languid; palpitation very distressing; considerable oppression about the præcordia; on the whole very unwell; drink and urine considerably diminished; blood taken yesterday can be suspended on a probe; feels most comfortable in bed, and cannot walk without difficulty; stools for the last two days rather brown, and without any blood; tongue a little cleaner; mouth still very bad tasted. Ordered powders of ipecacuanha and oxyd. antimon. c. phosphat. calcis.

23d.—Sweated some through the night; feels to-day easier; pulse as before; ℥x. of blood again taken in a very full stream, and with great force; pulse sensibly weakened by it; otherwise it was intended to have taken a much larger quantity; much relieved while flowing; never any tendency to syncope.

24th.—Thirst lessened; in other respects as before; ℥xv. of

blood taken; flowed with great force as in pneumonia; pulse before bleeding 108; after it 110, and much weakened. Blister to be repeated.

25th.—Blister discharges freely; serum of the blood taken yesterday of the appearance of the matter of a scrofulous abscess; crassamentum has the tenacity of healthy blood; considerable buffy coat; has much less thirst, and voids about one-third less urine than before; thinks his mouth not quite so bad tasted as before; has sweated a good deal; skin softer and more natural; urine not quite so sweet.

26th.—In the morning while in bed, pulse 104; after being up 120, tolerably firm; rather more thirst to-day; urine not increased; ℥x. blood taken, flowed more feebly; bowels regular; stools brown; sleeps tolerably.

On the 28th, ℥xii. of blood taken; on the 29th a similar quantity. No material circumstance occurred, till December 1st, when a violent diarrhœa came on, with severe griping; drunk little since it came on; urine diminished to one half; pulse 100, and firm; little appetite; feels very languid; stools still brown.

December 2d.—Diarrhœa continues; stools very dark brown; very languid; griping very severe; pulse 100, tolerably firm; urine for these last two days not above ii lb.; thirst also greatly diminished.

3d.—Diarrhœa diminished; urine increased to the same quantity as before the diarrhœa, but drinks less; pulse as yesterday. Pills of calomel and ipecacuanha ordered.

4th.—℥xii. of blood taken; pulse weakened by it; in other respects as before.

5th.—Blood taken yesterday tolerably firm; ℥xii. more taken: pulse weakened again by it.

From this date nothing was heard of him till the 27th, when he returned nearly as when he left us. Urine continues about one-third less than when the bleeding was begun; thirst also less; tongue a good deal cleaner; has had occasional diarrhœa; bowels now, however, easy, and stools natural, which has not been the case for two years; pulse still weak, and varying very much in frequency; ℥xii. of blood taken with no sensible effect, but that of making the pulse still weaker; blood much of the natural appearance. On the 29th, ℥xv. of blood again taken; for the first time it produced some tendency to syncope, which continued for about two hours. The pulse, which before the bleeding was weak, vanished after it into a mere tremor. Thirst and urine nearly the same.

Tinct. meloes vesicator. ordered.

Since that time he has continued by report nearly stationary.

About the middle of February, about ℥x. of blood were taken from him, which produced immediate relief of headach and general oppression, with which he had been for some days troubled.

Upon the whole, although some of the most essential diabetic symptoms are considerably abated, there is no appearance of any thing like a return to health.

X.

Facts and Observations on Burns. By Mr Robert Lyall, Surgeon, Paisley.

So many papers have of late years been published on *burns*, that, by some practitioners, any further observations may be deemed superfluous. But let me ask those,—Whether medical men be yet agreed as to the best mode of treating burns? The answer must be in the negative; for different practitioners follow very different plans with such accidents; and every individual, no doubt, acts with the best intentions.

In the following paper, I have no wish to introduce any novel practice, but intend merely to give a statement of facts, and add a few remarks.

Dr Kentish, by his publications, brought about a complete revolution in the treatment of burns, and gained many followers. However, the practice he recommended, although well illustrated by cases, met with much opposition,—from some who were prejudiced,—from some who never made a fair trial of his method of cure,—and from others who, in my opinion, did not clearly comprehend his principles.

During my residence at Manchester, as house-surgeon to the Infirmary, &c. I enjoyed ample opportunity to try Dr Kentish's mode of treatment, and observe the effects. The results of my practice, for ten months, viz. from September 1808, till July 1809, were carefully marked in my note-book, from which the following statements are taken. * In the above limited space of

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* The Surgeons of the Manchester Infirmary, to whom I am under many obligations, knowing the particular attention I gave to burned patients, left them in a great measure to my care.

time, the number of burns which were treated at the Infirmary, amounted to 25; and that of scalds, to 55—Total, 80.*

Of the individuals who were

*Burned,	7 were in-patients,	of whom	6	died,	1	recovered.
	18 were out-patients,	—	2	—	16	—
Scalded,	5 were in-patients,	—	1	—	4	—
	50 were out-patients,	—	5	—	45	—
			14		66—80	

I dare say, that any one who carefully surveys the whole of the above table, will be inclined to draw a favourable conclusion as to the method of cure adopted. The first line of it may astonish some, the mortality among the in-patients being so great; and therefore I judge it necessary, in elucidation of this point, to state some circumstances of importance, relative to three of the fatal cases.

In the case of a woman, ætat. 40, the whole body, except the legs, was severely burned, in consequence of her falling into the fire while much intoxicated.

She was brought to the Infirmary about two in the morning, (two hours after the accident), from some distance.

The weather being cold, and the woman very thinly clothed, shivering soon came on, and continued some time after her arrival. She was instantly put to bed. While bathing her with warm *ol. terebinth.* vomiting began; and, notwithstanding the exhibition of medicine, various kinds of diet, &c. continued to return, at short intervals, for three days, when she expired. Nutritive glysters were frequently administered.

In another of the fatal cases, the patient had for a long time been subject to epilectic fits, during the continuance of which she had often been burned from falling into the fire.

By the frequency of the fits, the repeated and long-continued suppurations in consequence of the accidents, together with habitual costiveness, and frequent ischuria, she was almost reduced to a skeleton; when, in another fit, she had the misfortune to be burned in the same manner.

Her neck, and tops of the shoulders, were scorched, so as to destroy the cuticle; but I considered the accident trifling, and made her an out-patient.

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* I made the distinction into *burns* and *scalds*, only because I wished to ascertain, whether the stimulating mode of treatment was equally applicable to burns produced in various manners.

Finding afterwards that she did not attend regularly, owing to the return of her other complaints, &c. with the concurrence of my friend Mr Ransome, I ordered her to be made an in-patient. The sloughs were cast off, and the sores suppurated kindly. She lived three weeks after she met with the accident, during which period she had all the complaints enumerated above, and besides was frequently delirious. *

In a third case, of a child about five years old, the face, breast, belly, &c. were severely scorched. The accident happened on the night of the 9th of February; but the child was not carried to the Infirmary till next morning, when she seemed almost exhausted. The warm dressings were applied, and stimuli ordered. The nurse neglected to give the stimuli. The child kept quiet and languid till seven in the evening, when she expired.

Taking into consideration the circumstances attending the first of these cases, especially the continual vomiting, it is evident that no plan of treatment could have saved the patient.

In the second case, the emaciated state of the woman at the time of the accident, with the complication of disease, show, that, although the *burn* apparently was the immediate cause of death, yet it had many auxiliaries, which render it highly probable that she would not have lived long, independently of any injury.

In the third case, from the long interval between the accident and the time the child was brought to the infirmary,—from the weak condition she was in when the dressings were applied, and from the neglect of stimuli, a cure was not to be expected.

Regarding the *scalded* in-patients, (of whom four recovered and one died), it is proper to mention, that one of them had the neck, breast, belly, back, scrotum, and thighs, very much hurt. This patient recovered.

The other three patients, who got well, had both legs and feet scalded.

The case of the individual who died has been omitted in my note-book.

I shall now speak of the out-patients.

In the numbers stated is included every *burn* or *scald*, in which a part of the body not less than a hand or foot was injured.

Most of the accidents happened either to infants or children,

* I afterwards learned, that her mind was greatly impaired by the epileptic fits; and that, when troubled either in *body* or *mind*, she readily became delirious.

and in different manners; as by falling into the fire; by the clothes catching fire; by gunpowder; by lime; by steam; by hot water and other fluids, &c.

Of the eighteen out-patients who were *burned*, many of them had a great part of the body injured, though only two died; and those who recovered were equally, if not more severely burned, than those who died.

By altering the numbers, the last observation will apply also to the out-patients who were *scalded*.

Upon the whole, I must think the plan of treating burns commended by Dr Kentish, a very excellent *methodus medendi*; and would here remark, that, from much and attentive observation, I am satisfied that the successful treatment does not altogether depend upon the application of the external stimulating dressings, but as much on the exhibition of stimuli internally; and that it is by conjoining both, or bringing about the unity of action of the whole system, noticed by Dr Kentish, that we are to expect a happy termination.

In treating the patients at the Infirmary, I almost invariably gave laudanum in large doses, for the first two days after the accident, and then gradually withdrew it.

Since I left the Manchester Infirmary, I have had several opportunities of treating burns, * in a different manner from that spoken of above; from the result of which, and of some conversations with several intelligent practitioners, I am led to believe, that in those cases in which the application of the burning body is of very short duration, or rather, I should say, in which the structure of the cuticle is not destroyed, and when the injury does not happen near the vital parts, that cold applications, as water, solutions of sugar of lead, &c. may be used with propriety and advantage. I lately heard a lecturer on surgery mention, that in some cases, where the thorax or abdomen was the seat of the burn, and cold applications were used, peritoneal, &c. inflammation followed, and the patients died. Keeping in mind the operation of continued cold on the system, (especially on the trunk), and some of the laws of the animal economy, such an issue might have been looked for. Therefore, when *burns*, by whatever cause produced, or to whatever extent, happen on the thorax or abdomen, I would never use cold dressings, but have recourse to the warm terebinthinate applications; or, if I wished a milder dressing, to the carron oil, (Liniment. aq. calcis).

* Now I use the word *burn* according to the usual acceptation.

XI.

Observations on the Use of the Eau Medicinale, and of Rhubarb, in the cure of Gout. By B. G. Burroughs, Esq. &c. Clifton.

An dentur specifica quæ vocantur, sive illa quæ propriam vim habent adversus morbum quo æger laborat. Multa hujus generis ubique venditata sunt, quorum paucissima fautorum promissis, et medicorum votis responderunt.—Commentarii Guilelmi Heberden, cap. 2. de Ratione Medendi.

Of the many thousand remedies for diseases offered to the world by empirics, how very few of the number have been found of sufficient importance to engage the attention of the Faculty, notwithstanding the bombast and the promises of infallibility which have accompanied the introduction of these nostrums; and I question whether any *one* has been so generally successful as to answer the character given of it. If any one, in a reasonable degree only, has been found beneficial, thousands must have failed; for we find the diseases for which the greatest number of specifics have been from time to time announced, are still in as much force as ever, if not more so; such as scrofula, gout, and consumption. The continuance and wide-spreading destruction of these diseases, notwithstanding the numberless remedies, and the numberless persons that have proffered to cure them in the last fifty years only, are sufficient evidence of the inefficacy of every thing which has hitherto been discovered for these maladies.

We should therefore now receive with proper caution any new proposal for the slight-of-hand cure of these complaints—I say with proper caution; because, in the many attempts to cure diseases in an empirical way, a great deal of mischief must oftentimes have been done, and many lives lost: It therefore behoves the Faculty not to give their countenance hastily to any empirical measures that may possibly produce a recurrence of these evils.

Very lately a new medicine for the cure of gout has been introduced into this country, called *eau medicinale*, which at present has great reputation, and has therefore excited considerable interest. From this it will soon meet with extensive application; and therefore, to prevent it from doing all the harm, as well as to ascertain all the good it may do, I think it may be serving the public, as well as the profession, to collect and make known as

many facts as possible relative to this medicine; and if every medical gentleman would contribute his portion of experience, all the information necessary would soon be obtained, and we should soon be able to decide to what degree of praise it is entitled—whether, in the first place, it is a medicine generally useful, and under what circumstances of disease it should be given—or whether, upon the whole, it is hurtful, and ought to be discountenanced. Information of this kind, coming from persons no way interested in the sale of the remedy, would have considerable weight, and might become highly beneficial. Considering the high character of the medicine, and the many that must already have had recourse to it from this circumstance, I am surprized that so little has been said on the subject of its merits in the medical periodical publications. I have had only two arthritic patients that have tried this medicine, and I freely give my experience of its operation in these cases; at the same time hoping that others who have had more frequent opportunities of trying its powers, and who are therefore better able to appreciate its worth, will indulge us with the benefit of their knowledge.

Sir E. H. an Irish baronet at this place, aged about 70 years, was the first person that I had seen taking it. He had been troubled with gout at various periods during thirty years, of which disease distorted joints bore the most ample testimony: Independently, however, of these appearances, his body exhibited no mark of disorder, and for his time of life might be considered healthy and strong. The attack of gout in which he began with the *eau medicinale* was exceedingly severe, and pretty general, attacking ancles, knees, and elbows. In this state with much avidity he took half a bottle of this medicine; but not finding any amendment from this dose, after an interval of six hours, he had recourse to the remaining portion. This, however, soon began to have effect, and operated most powerfully by all the secretions, occasioning at the same time violent vomiting, purging, sweating, and acting no less violently by the kidneys. These powerful effects continued without intermission for at least forty-eight hours, when the patient became exhausted to the very last extremity, and at the time my interference was requested, appeared almost lifeless; body motionless, and covered with a cold moisture; voice nearly inaudible, and the powers of perception scarcely remaining. Nothing for some time could appear more unpromising. By diligent and unremitting attention, however, with the aid of warm Madeira and cordials, the exhausted powers were supported, and at length raised; but the patient long remained in a state of considerable weakness, and his convalescence was for some time doubtful. It is unnecessary for

me to say, that this fit of gout was completely removed by this violent process,—a cure which almost cost the patient his life. In one particular, perhaps, the patient erred, and that was by taking the second dose too soon after the first. The period between each, it may be thought, should have been longer than six hours; but it should be remembered, that the pamphlet published on its merits, states, that some persons take a whole bottle at a time:—how then, are the public to discriminate when they should take a larger or a smaller quantity? The baronet certainly had some prudence in the matter; for he did not take the remaining half bottle, until a lapse of six hours had given him every reason to suppose that it would produce no effect. Had he unfortunately taken the contents of a whole phial in the first instance, there is every reason to suppose that he never would have recovered the shock. I have stated so much to show, that the medicine is very powerful, and that great care and attention is necessary in the use of it; and that patients disposed to try it, should, in the beginning, measure their way very carefully.

My second patient was Mr Barry, a very respectable watchmaker of this place, in whom this medicine produced the most alarming effects, with a very considerable aggravation of gout; and as the cure was particularly interesting, I requested him to furnish me with the particulars, in order that I might have a correct and faithful document of all the circumstances attending the use of the *eau medicinale*. The following statement, drawn up by himself, he was kind enough to send me.

"About the middle of January 1811, I was threatened with symptoms which generally portend *a regular* fit of gout; its violence, however, did not, as on most preceding occasions, increase in any particular part, so as to deprive me of rest, or cause actual confinement, till about the 28d, when the attacks in the stomach becoming much more frequent and formidable, I determined on taking the celebrated *eau medicinale*, two bottles of which I had long kept by me for that purpose. I began with half a bottle, which for two hours seemed to produce little or no effect. I then felt considerable pain in the head, whether of real gout, or the effect of the medicine, I cannot say: this was soon succeeded by delirium, afterwards a great nausea on the stomach, purging, and sickness; but not the smallest disposition to perspire. This continued eight or ten hours, when I began to expect the wished-for relief, of which I had so long and so confidently flattered myself the medicine would afford me; but alas! I found the disorder increasing, both as to extent and virulence; and, after a lapse of four or five days, I took the other half-bottle, with, however, no other effect than a nausea of much less duration than the

former; still, however, without the wished-for success. Being then apprehensive that I had not taken a sufficient dose, I resolved, after a similar interval, to take the remaining whole bottle at once, which had much the same effect in every particular as the first half-bottle; with this difference only, that the sickness was of much longer continuance, but not sufficiently violent to enable me to vomit without great difficulty. The nausea on the stomach remained for several days; and the gout there, as well as in the extremities, evidently gaining upon me, presented no other appearance or feeling, than that I must shortly sink under it. Much about this time there appeared all over my body an eruption resembling very much the measles; but as I had had that disorder many years before, I concluded it must have been occasioned by the medicine. A few days after this, I was seized in bed very suddenly with a copious spitting of blood, attended with a wheezing from the throat, and coughing, which for a while threatened suffocation: this, it is supposed, must have arisen from the rupture of some vessel about the lungs, by efforts made, during the sickness, to vomit.

"The hæmorrhage continued to return in an alarming degree, at intervals, for a week or ten days, till, weakened by its frequent recurrence, and apprehensive, if longer neglected, it would inevitably lead to the most dangerous consequences, I called in two medical gentlemen to my assistance, by whose skill and attention I was soon restored to a state of rapid recovery."—Here is a very clear and able description of a violent fit of gout, in which the *eau medicinale* had a very fair trial, and wherein it not only completely failed, but was soon followed by a considerable aggravation of the complaint, and with symptoms threatening the most imminent danger,—delirium, violent vomiting, intense pain, the body covered with eruptions, and accompanied with feelings and appearances as if he had been poisoned; to these succeeded an alarming bleeding from the lungs, placing his life for many days in a state of imminent danger. The patient had often had attacks of gout that were fully as violent as this in the commencement, but were never followed by such distressing and alarming symptoms as appeared on this occasion: it is therefore but reasonable to suppose, that the very unusual disturbance in his system was occasioned by the remedy. How far to refer the hæmorrhage from the lungs to it, may perhaps appear difficult; unless we suppose there may have been some translation of gout to that part, as well as to the stomach and head, or perhaps some vessel may have been ruptured in the lungs from the violent straining in vomiting. Whatever was the cause, the effect

was productive of great danger and alarm. I shall not attempt any reasoning on the operation of the medicine, but leave that for more able hands to do; but I cannot help remarking the similarity of its effects with some vegetable poisons, in its violent operation on the stomach, succeeded by a sort of nettle-rash eruption over the whole body, which frequently happens also after what is vulgarly called a surfeit; that is, when that organ is violently disturbed by any thing that powerfully disagrees with it. I have now given the whole of my experience of the powers of the *eau medicinale*; and hope that others who have had more opportunities of seeing it tried, will be tempted to favour us with any information which they may be able to communicate, in order that such a stock of knowledge with regard to this medicine may be accumulated, that the faculty at large may be able to decide upon its merits, and thereby be enabled, if generally beneficial, to employ it, or if otherwise, to restrain the destruction it may occasion. The impression on my mind at present, from these trials, is by no means favourable to its general adoption.

While I am on the subject of gout and its remedies, I cannot help expressing here the pleasure I received from reading, in the Philosophical Transactions for last year, Part I., the experiments of Mr Home and Mr Brande on magnesia, for the relief of calculous complaints. Its modus operandi appears to be, by preventing the formation of uric acid; and from the result of their experiments, it appears in several instances to possess a greater power in diminishing this acid than any of the other alkalies, though these were employed very largely. I think that this is a discovery of great importance, both to those troubled with calculous complaints, and to those concerned in their treatment. But the interest I felt in their experiments arose from this circumstance, that in their treatment of one nephritic patient with magnesia, who was also a very gouty subject, (a very common occurrence), they remarked, he had not the slightest symptoms of gout from the time of the last attack, which was more than a year back; a longer interval of ease than the patient had experienced for the last six years. I believe, but for the latter observation of the remarkable exemption from gout, which the patient experienced during, and after, the use of magnesia, that Mr Brande's paper would have passed through my hands without making any great impression on my mind; but his remarks here are so analogous with my own experience of the utility of magnesia in the prevention of gout, that my attention was completely arrested. Since it has been lately suspected that gout has arisen from a redundancy of a peculiar acid termed uric acid,

the alkalies have been employed pretty freely for gout, particularly soda; and I believe it has been used in many cases with considerable advantage. But I have repeatedly found the daily and continued use of magnesia still more beneficial; and patients, during its use, have enjoyed so wonderful an exemption from gout, that they could scarcely attribute their relief to a remedy apparently so unimportant; and many more would have shared its advantages, by a freedom from the disease, had their faith in the means been sufficient to have kept them to its regular use; but, from a want of this, they were not so fortunate. The ingenious Mr Home, to whom the public and profession are already so much indebted, considers the superiority of magnesia over the other alkalies, in the prevention of uric acid, to consist in its insolubility in water, as it thereby remains longer in the stomach, and gives it a greater opportunity of combining with an acid; while the other alkalies, from their solubility in water, are carried very rapidly into the circulation. But leaving the theory of its operation out of the question, Mr Home and Mr Brande have given us great reason to believe, that it does generally exert a greater power in preventing the formation of uric acid, than any other medicine we are at present acquainted with; and if gout does at all depend on the presence of this acid, it is surely of great importance to know the best means of correcting it, as we are thereby enabled to keep off, if not cure, a complaint that makes so many people dupes to almost every empiric pretending to cure gout. I have generally ordered my gouty patients to take regularly twice every day, more particularly in the intervals of the disease, as much magnesia, sometimes joined with a small quantity of rhubarb, not exceeding five grains, and a grain or two of ginger, as their bowels will admit. If this plan is regularly and constantly adhered to, I feel very confident that arthritic patients will receive much benefit, and not only greater freedom from gout, but also from calculous diseases, in which this medicine was so beneficial, by the experiments of the gentlemen before-mentioned; these complaints generally arising from the same causes, and frequently occurring also with gout in the same subject. It will also have another recommendation to the gouty, from this consideration, that they will be under less necessity of submitting to restraints in eating or drinking, than they can possibly be under by any other system; for this medicine is better calculated for counteracting dyspeptic complaints than almost any other, and when combined with a small quantity of rhubarb and ginger, forms one of the very best remedies for strengthening the digestive organs, that we are at present acquainted with; an object of no small importance in gout. I claim the merit of no great originality

in the recommendation of this medicine, as the same has been recommended in gout in the writings of Cullen, and I believe also by Heberden. They, however, have only mentioned it casually as a useful purgative when wanted; but I recommend it as medicine not for this purpose only, but as one likely, when taken constantly, to be productive of permanent advantage, by preventing the recurrence and occurrence of two powerful diseases.

Mase, Clifton, May 11, 1811.

XII.

History of Three Cases of considerable Effusion of Blood, from local Injury, to show the utility of making a free Incision to allow of its removal. By GEORGE LANGSTAFF, Member of the Royal College of Surgeons, London.

IN extensive effusions of blood, either beneath the integuments or fascia, arising from external violence, it is, I believe, the general practice to apply cooling lotions to the tumor (or ecchymoma, as it is termed) in order to prevent the surrounding integuments from suffering from the consequences of inflammation, as well as to assist the absorption of the effused blood. This plan of treatment, even when conducted in the most scientific manner, and under the direction of many eminent surgeons in London, I have seen attended with the following consequences: The patient suffered excessive pain from the inflammation, and tension of the skin, which caused symptomatic fever; the integuments at last sphacelated, and produced an ill-conditioned sore, discharging an offensive sanies with ichor, which was with difficulty healed.

Being fully aware that a plan far more effectual than the former might be adopted, I was induced to have recourse to the following expedient, which, I am happy to say, even exceeded my expectations; as will, I trust, be fully proved by the success which attended the following cases.

A boy about 13 years of age, fell from the mizen-top of a ship, and struck the ulnar part of his right arm; a swelling and discoloration immediately ensued. The next day the bruised part was extremely painful, and the whole arm swoln. On the following morning I found a tumor about the size of an orange,

in the under part of the arm, about three inches from the extremity of the ulna, or olecranon; the integuments were hot, and so tense, that the tumor felt like a solid substance.

A free incision was made through the integuments, which proved the contents of the tumor to lie beneath the fascia of the fore arm: this was also divided to the same extent as the former, when a small tea-cupful of coagulated blood was removed, resembling black currant jelly in appearance, as well as in consistence. The part was well sponged with warm water; the wound brought together with adhesive plaster, and healed by the first intention, except a small aperture, from which there was a sanious discharge. Both the pain and swelling soon subsided by the use of cooling applications, and the wound healed.

Mr Dear, a carpenter, aged 70 years, remarkably stout, and of an excellent constitution, received a blow on the left hypochondrium, by the fall of a large piece of timber. Having been taken to his apartment, a surgeon was sent for, who ordered aq. lith. acet. comp. as an external application to the part, which, in the course of a few hours, was swoln to an immense size. This plan of treatment, with such internal remedies as were thought proper by his attendant, was pursued six days; but the extreme violence of the pain, heat and inflammation of the part affected, together with the symptomatic fever, had so much alarmed the patient and his friends, that they imagined the injury to be of more serious consequence than it really was. At this time I saw him. He was delirious, and had been so two days; his pulse was full and hard; skin hot and dry; tongue parched; urine high coloured. I found a tumor extending from the middle of the crista ilii to the margin of the fourth false-rib, and posteriorly as far as the spinous processes of the lumbar vertebræ. The skin had begun to slough, to the extent of an inch, at the most prominent part of the tumor. It was very hot, and extremely tense to the touch, which caused the patient much pain. The discoloration of the whole injured side of the body proved most evidently the violence of the blow.

Having no doubt that blood formed the tumor, and that the integuments would slough, to allow its escape, which might be attended with serious consequences, I determined, even under all the unfavourable circumstances, to lay the part fairly open, in hopes of relieving his sufferings, and expediting the curative process.

An incision of about three inches, including the sphacelated part, was made, and a small bason full of firm coagulated blood, like currant-jelly, taken out. The part was well sponged with warm water, and the sides of the cut afterwards brought toge-

ther with adhesive plaster, which considerably relieved the patient; cloths moistened with opiate lotion were frequently applied to the side affected; his bowels were kept open, and febrifuge medicines prescribed.

The febrile symptoms began to moderate shortly after the incision was made; and in the course of two days he was freed from pain and fever.

The slough formed did not extend farther; it came away, and the granulations appeared healthy. The part was dressed with adhesive plaster, and soon healed. The incision healed by the first intention, except about half an inch of the inferior part, from which there oozed, for nearly a fortnight, a considerable quantity of watery fluid, tinged with dark-coloured blood. It united by means of adhesive plaster and bandages, and the patient completely recovered.

A man fell from a one pair of stairs window, and the accident produced a swelling in the fore-arm, not unlike that of the first case. An incision was made through the integuments and fascia soon after the accident, and the blood evacuated whilst in the fluid state, which no doubt is the most eligible practice. The wound was dressed with adhesive plaster and bandages, and kept cool with opiate lotion. It united by the first intention, and was well in the course of a few days, excepting a tenderness occasioned by the contusion.

I do not mean to infer from the above cases, that the same practice should be adopted in every effusion of blood from local injury, as I have seen many do well under the usual treatment, which, however, requires a considerable length of time. The extent of the injury, and the effects likely to result from it, must be accurately considered, and will serve to regulate the surgeon's conduct.

From the successful termination of these cases, I shall be induced to follow similar steps in every extensive effusion forming a collection of blood or tumor (if I may use the term); but this should be carefully distinguished from ecchymosis, which is merely blood effused into the cellular substance by the rupture of small arteries.

I could relate several other cases where similar management was equally successful, but it would only lead to unnecessary repetition.

Upon the same principle I recommend an early evacuation of effused blood while in a fluid state, in almost every instance, and I have found it particularly successful where blood is effused into the cellular substance of the labium after parturition, or

where a tumor presents itself under the scalp, either from great pressure during lingering labour, or from the use of instruments.

13, *Fore Street, Finsbury Square,*
1st June, 1811.

XIII.

Cases of Hæmatemesis, connected with the discharge of Larvæ by Stool. By John Chichester, M. D. Bath.

It sometimes happens that the larvæ of certain insects are conveyed into the human stomach, where they become very troublesome and dangerous inmates, as the following cases are well calculated to prove, and which are at your service for insertion in the Edinburgh Medical and Surgical Journal. The girl whose case is here related, was apprenticed by the parish to Mr Huxtable, of the corporation of surgeons, and a resident practitioner at Williton, in this county. It was not confined to his own observation, but was seen, as he informs me, by Messrs Crang and Abraham of Dunster, Mr Warren of Minehead, Mr Sully of Wiveliscombe, and Mr Holman and Warren of Milverton. I was not consulted until the latter end of May 1807, when the patient was labouring under general dropsy, occasional vomiting of blood, and stricture in the throat, and constant pain in the superior part of the head. I therefore had not an opportunity of inspecting these larvæ, nor can I, from the description given, say to what family of insects they are to be referred. A story was told in the neighbourhood, of one of them having changed into a musca, but this must have been a mistake, as the larvæ of that insect are without feet. It would have been of consequence to have ascertained what effect the dolichos, as well as some other drugs, would have produced, if they had been mixed with the different animal substances which were so readily devoured by these grubs.

Case I.

In the month of June 1806, Mary Gardner, aged 14, was seized with pain and sickness at stomach, and occasional pain in the head, which continued fourteen days, in the course of which time she vomited spontaneously twenty-four large round worms.

Three weeks after she went to see her parents, living three miles off, and when about one mile on her way was attacked by considerable pain in her left side, near to the seventh or eighth rib, and also in her head, which she described as resembling a blow from a stone, and which (in her own words) almost stunned her. She then began to spit blood, and before she could reach home, her whole surface was covered with urticaria. On her arrival she began to vomit blood, which continued with great violence all the night, and amounted to several quarts, coagulated and unmixed with any other fluid. From this time the pain in the stomach and head continued, with a prodigious vomiting of blood, for ten days, during which time very little or nothing could be got down; for as soon as any thing liquid or solid came in contact with the œsophagus, violent convulsions of the muscles subservient to deglutition came on, and the greater part, if not the whole of what was attempted to be swallowed, thrown out with much violence. She made a noise like a person in croup. There had been no evacuation by the bowels, during this time, but she had made water as usual. She now signified by gesture, being unable to speak, that she had something in her throat. The probang was passed, which afforded her temporary relief, and ten grains of the submuriate of mercury were introduced into the stomach and retained; and this was succeeded by a discharge, per anum, of many hundreds of living animals, in shape and size very like a small grain of barley: the front resembled that of a hog; they had three legs on each side, were of a brown colour, encrusted with three rows of bristles, running longitudinally over the back, and three long hairs in the tail; they were extremely active and voracious. Different kinds of animal food, fresh and salted, were put before them, which they eagerly devoured. Some were immersed in alcohol, some in port wine, and others in oil, but they did not appear at all affected by either. Some of them were alive six weeks after their expulsion. The vomiting ceased in about fourteen days, and then she lay without motion for one whole week, and without swallowing any thing during that time. She now and then opened her eyes, and answered when spoken to, but incoherently. The region of the stomach was much swollen, so as to project considerably. On the return of her senses, the vomiting of blood, and stricture of the œsophagus returned also, but with much less violence than before. In the month of February following, she discharged about one hundred more of the same kind of larvæ by vomiting. In the month of May, general dropsy, accompanied by numbness of the right hand, and constant pain in the head, with occasional difficulty of swallowing, came on,

In a few weeks, however, the dropsy gradually subsided; but the vomiting of blood, and stricture in the throat, continued to trouble her at times for eighteen months, which diminished into a slight spitting of blood, and that principally on experiencing any mental irritation. She is at this time, 2d April, 1811, quite well in every respect.

Case II.

Capt. Norman, at this time in the employ of Messrs Mackenzie and Glennie, merchants, London, laboured under an occasional discharge of blood from the stomach, and other distressing symptoms, during the greater part of two years, which seem to have been occasioned by the presence of the larvæ of a species of œstrus. I here quote his own words to me:—"On 1st September I began to discharge maggots by stool, and which continued two or three times a-day during a fortnight; they amounted to many thousands, and were in shape exactly like a bot-worm, but of about one-third the size only. They were alive, and came away quite separate from the excrement. Immediately on completing the discharge of these grubs, my health began to improve, and I was soon as well as ever." Capt. Norman had been accustomed, during his youth, to pass a great number of long round worms; and the summer before the discharge of these larvæ took place, he passed some ascarides.

Bath, 28th May, 1811.

THE INQUIRER, No. XXII.

"*What are Facts, and the best authenticated Opinions concerning Diabetes?*"

A treatise on diabetes I have long considered as one of those meditations upon death, which the high-priests of Æsculapius think right to deliver from time to time to their brethren and congregations. I have no particular objection to these funeral orations, provided the occasions are rare, and the preacher gives a full and faithful account of his sick friends; of the means used to prolong life, or to procure an easy death. But,

unfortunately, the conclusions do not correspond with the premises. We are told of the pains and sufferings of patients, and of the immediate relief and removal of them, by animal diet and tonic medicines; but we meet with the former, without ever being cheered by the happy realization of the latter. Every physician is supposed to be gifted in some degree with the power of prophecy. It is therefore discouraging to a young man soon after he is converted by the creative voice of the Senatus Academicus, from a moderate philosopher into a doctor, to lose his patient, and to have his prognostic fall flat upon his nose. Dr Latham boldly asserts that animal food, in the early stages of diabetes, will almost to a certainty cure it. * From the same confident assertions of Rollo and other authors, the disease may be supposed tractable and easily cured. But I have now lying before me clinical records of twenty-six cases of diabetes which came under my observation, and I can at this time only count their graves. I observe that nineteen or twenty of Dr Latham's patients died, in spite of his treatment and speculative opinions; and twenty cases mentioned by Dr Parr † resisted the best concerted plans of cure. Whatever becomes, therefore, of the eulogium which has been paid to the animal diet, and to the proposers of it, the exemplification does not strike me as happy. Patients, and sometimes physicians, are led, by attending exclusively to the quantity and condition of the urine, to suppose the sole cause of the disease to be connected with that excretion; and therefore, when the state of the urine becomes natural, or more healthy, they are apt to fall into the greatest delusion respecting their actual situation, by asserting that they are recovering, although the emaciation is evidently growing worse. Of the various cases recorded in Dr Rollo's book, very few regained their fat and healthy appearance, and it is not ascertained how long they survived; yet, from the quantity of urine being diminished, and its quality changed, they were deemed cured. Surely the continuation of the emaciation proves, that the diseased state of the whole system was unaltered, and clearly shows that something more was required for the reestablishment of health, than the means directed to one organ so confidently employed.

All the current opinions on the causes of diabetes may be reduced to two: first, that which refers it to some fault in the organs of digestion and assimilation; secondly, that which attributes it to a morbid action of the kidneys. The various theories

* Facts and Opinions concerning Diabetes, p. 237.

† Medical Dictionary, Article Diabetes.

have sometimes been founded upon one of these suppositions, and sometimes upon both. "Causa igitur determinata consistere debet in his duobus momentis: 1*mo*, In bonorum humorum ex chylo generandorum degeneratione in materiam excrementitiam ad urinæ vias abire solitam. 2*do*, In concurrente dispositione rerum. Quod autem illud est quod in illa actione subigentium et præparantium serie obveniens, impedit elaborationem utilium humorum, illud non constat, ejus enim non habemus experimenta sufficienta." *

Since Metz's time the labours of chemical inquirers have greatly augmented the wonders of diabetes, and brought within the range of philosophical discussion many phenomena which were before left to the credulous fancy of old medical writers. Yet still the opinions afloat amount to a mere expression of the fact; they do not illustrate the causes, or even the first series of changes, in any degree. If the assimilation of food were imperfect, the blood must differ in its chemical composition from blood in the healthy state; yet I have analysed the blood taken from a diabetic patient, and never could detect the existence of sugar in the serum, nor any material difference in the other component parts. The alleged alteration in the chemical qualities of the urine is again contradicted by experiment. The point in dispute is, whether diabetic urine contains urea: or whether the presence of saccharine matter supersedes the other substances usually contained in this secretion? In another place † I have stated, that in all the experiments which I made on diabetic urine of different patients, and at different periods of the disease, *urea* was always detected, and likewise all the ingredients of healthy urine. That opinion has been confirmed by subsequent experience, and has received additional confirmation by the accurate analysis of diabetic urine by Dr Bostock and by Dr William Henry. So well established is that opinion on the basis of experiment and observation, that I am not disposed to relinquish it, although the analysis by Messrs Nicholas and Gueudeville gives a different result, and their conclusions are supported by MM. Dupuytren and Thenard. ‡ The source of error will probably be detected in some future trials, and the apparent contradictions may then be reconciled.

Another important point is, the proportion which the quantity of urine discharged bears to the substances taken into the sto-

* Metz, Diabetis Observatio, in Disp. Med. Pract. Haller, tom. IV.

† Vide Edinburgh Review, Vol. III, p. 420.

‡ Annales de Chimie, tom. LIX. Nicholson's Journal, Vol. XX.

much. The more minutely this circumstance is investigated, the more nearly the quantity of egesta and ingesta will be found to correspond.

This subject brings me to the opinion which Dr Latham has delivered on the criticism of Aretæus. He thinks an unwarrantable attack has been made upon the accuracy of the Cappadocian, and he has translated the chapter Περὶ Διαβήτεος, to put the reviewer's knowledge of Greek to the test. With what labour and accuracy the convenient works of Schrevelius, Hederick, and Johnson, have been thumbed, a reference to the critical analysis in the last Number of this Journal will sufficiently explain. "Diabetes is a wonderful affection," (says Aretæus) "not very common among men:" which authorises the conclusion drawn, that he had seen very few cases of it; and his acknowledged accuracy is impeached, by his describing the patients as making urine without intermission, besides other symptoms, which even his advocate admits must be ascribed to ischuria.

With regard to the causes of diabetes, there does not appear any necessity for any confession of error, because the common mistake of making Aretæus attribute the disease to the bite of the dipsas is studiously avoided. Nothing is mentioned in the article alluded to about the serpent; and the passage in the original cannot be understood in any other manner than as an illustration;—it is introduced in a *conditional* sense.

The following summary may perhaps give an impartial statement of the facts, and best authenticated opinions concerning diabetes.

Diabetes appears to be a disease of the whole system, and not confined to any morbid action of one particular part. This is rendered probable by the symptoms, by the remote causes, by the effects of remedies, and by analogy with other diseases.

The state of the skin, excessive thirst, emaciation, sometimes without corresponding debility of the muscular powers, inordinate appetite, saccharine quality of the urine, are the most common characteristics of the disease.

An increased quantity of urine in proportion to the liquid ingesta, and saccharine matter in the urine, are not necessary to constitute that morbid condition called diabetes: since the quantity of urine discharged, in most cases, corresponds with the quantity of fluids drank, sometimes does not amount to more than three pints in twenty-four hours, and sometimes the urine is perfectly free from saccharine matter. The disease is seen in persons of both sexes; and attacks from the age of eight to seventy years. I have seen a girl eight years old affected with it. It seems also to be hereditary. I knew two brothers, both

rection of the ablest inquirers elsewhere, that we trust they are the inferences from a most ample research. All that we learn from the author, upon this point, is contained in a sentence or two in the preface; where he states, that the number of patients that have been under his treatment "has been very large;" and that "in the course of two months only, September and October 1808, there passed under his superintendance 168 patients, of whom 55 had continued fever, 50 intermittents, and 29 dysentery, for the greater part important and formidable cases."—"Few opportunities," he adds, "occur where, during an equal period, more ample or satisfactory experience could be presented." The patients were lodged in a building, admirably adapted to the purposes of an hospital, which was formerly the College of Jesuits at Messina; and the management of them was left to the uncontrolled direction of the physician in every respect.

In the first chapter, Dr Irvine treats of "the climate of Sicily," and the other circumstances which constitute what has been called the *medical topography* of the island. The chief peculiarity of this climate, which is included between 36° and 38° of north latitude, is its heat; the whole summer being oppressively hot, the thermometer in the months of July and August standing on an average at 86° in the day, and not much lower in the night. Nor is there often much actual cold in the winter; for the thermometer seldom sinks below 50°, between the months of November and May, but commonly ranges between that degree and 65° or 70°. Nevertheless "the vicissitudes of heat," Dr Irvine observes, "are very great; and I have often seen an alteration of 20° in the temperature within twenty-four hours: of consequence local inflammations are common during the winter season, and phthisis pulmonalis is frequently fatal." (p. 2.) The comparative healthiness of the seasons on the shores of the Mediterranean still continues the same as in the times of Hippocrates, Celsus, and Galen. The unhealthy season in Sicily occurs during the summer and autumn: by far the greatest number of deaths happen in these periods; the other seasons of the year are comparatively free from disease." * (p. 7.) The heat

* The reader will recollect the statement given by Celsus from Hippocrates: "Saluberrimum ver est; proxime deinde ab hoc, hiems; periculosior aestas; autumnus longe periculosissimus." (Lib. II. cap. 1.) This maxim, that the summer and autumn were the most sickly seasons, is not only ratified, Sir J. Pringle remarks, in the warmer climates, but also in camps, where men are much exposed to heat and moisture, (and, it should be added, to animal and vegetable effluvia), the great causes of putrid and contagious diseases. (On Dis. of the Army, Part II. chap. 1.) The absolute reverse of this is now true, in our own climate, since the

itself appears to give rise to much disease; but its combination with moisture is considerably more pernicious. From the beginning of May to the end of August little or no rain falls: in September the rains begin. "In June and July fevers are frequent, and have much of the inflammatory type. In August and September they are still more common, and begin to be accompanied with more debility: from that time dysenteries increase in number; but after the end of October few new cases comparatively occur."—"Light rains in autumn," the author observes, "are commonly observed to be unhealthy; and nothing is so serviceable for the prevention of disease as heavy rains, occurring about the middle of September, so as to extinguish the heat of the soil, and put an end to the formation of miasmata." The effect of rains, falling early in the autumn, while the ground is still hot, in exciting miasmata and disease, is well known to the inhabitants. "I remember a muleteer," Dr Irvine says, "passing over the hills near Ibesso, in the middle of August, during a heavy rain, who remarked, that these rains falling on the heated ground would cause a great stink (puzza), and that many would be poisoned." (p. 6.)

Sicily is a very mountainous country; and the chief sources of the "malaria," or bad air, are the water courses between the hills, which are dry in the summer. "Many of these are extremely unhealthy in the latter part of summer and in autumn." The north wind is cold in Sicily; but the qualities of the *sirocco*, or south-east wind, which is hot and damp, have been greatly exaggerated. Dr Irvine never observed any influence exerted by it on diseases. On the whole, he is of opinion, "that to those who can and are disposed to take proper precautions for avoiding the warmth of the mid-day in summer, and the chilliness and damps of winter, and the frequent and enormous vicissitudes of the temperature, Sicily will prove a healthy residence. To avoid the heats, it is only necessary to keep within doors; but to avoid the cold and vicissitudes, well finished houses, and the occasional aid of stoves, are requisite." (p. 7.)

In chapter second, Dr Irvine briefly states, that the continued fevers of Sicily vary in their symptoms with the variations of the seasons, and that, therefore, although he considers them as essentially of the same nature, he will describe them under the three denominations of summer, autumnal, and winter fevers. The first assume a very inflammatory type, run often a short

draining of land, and the cleanliness, good pavement, ventilation, &c. in towns have been generally attended to. (See Heberden on the Increase and Decrease of Diseases.—Ann. Med. Register, Vol. I. for 1808.)

course, but not unfrequently the contrary, and bear plentiful evacuations with advantage. The second are more seldom rapid in their course, are speedily marked by great debility, which is not so certainly cured by general evacuations, and which is frequently accompanied with universal yellowness of the skin. In the cool weather, that is, from November to May, fevers are less common, are more protracted in their duration, and are accompanied with less sudden and violent depression of the powers of life; in a word, "they very much resemble the synochus of England." These three forms of fever are the subjects of the three succeeding chapters, which occupy about half the volume.

The *summer fevers*, described in chapter third, although occurring at all times during the hot months, made their attacks especially after exposure to heat and exercise in the sun, sometimes suddenly, sometimes after previous indisposition. Soldiers on duty, as centinels, have been so powerfully and rapidly affected as first to drop their arms, and immediately afterwards to fall down themselves: and a man, sitting in the sun in perfect health, has been seized in a few minutes with vomiting, and exhibited every symptom of fever. The ordinary symptoms of acute synocha characterized the attack.

"The head always ached, frequently violently; the eyes were often suffused as early as the second or third day; the countenance was red; and the arteries of the head beat strongly. Before the eyes became red, and in cases where that symptom did not occur, they appeared watery and preternaturally clear. In some cases delirium came on very early. The bowels were costive, but not in general difficult to move. Sleep and appetite were gone. The disease had, not unfrequently, no tendency to a rapid crisis. I lost one patient on the 34th day, and many lingered to the 14th, 18th, and 20th. Occasionally, however, things ran a different course, and a fatal termination occurred on the 3d, 4th, or 5th day from the attack. One circumstance is rather surprising, that in some of the protracted cases, though by no means in all of them, the symptoms continued the whole time extremely violent, and no sinking could be remarked till a day or two before death." (p. 12.)

We think the following observations sufficiently important to warrant us in transcribing them at length, without any apology. It cannot have escaped the notice of practitioners, conversant with the appearances of continued fever, how often the occurrence of one untoward symptom, which might elude the observance of a common eye, will imply the presence of some morbid action of importance, at a time when the general symptoms are favourable: this will be various, according to the nature of

the organ in which the morbid action takes place; and is well exemplified, in regard to the head, in the following paragraph.

"In other instances," says Dr Irvine, continuing the observations just quoted, "the urgency of the disorder seemed by degrees to abate. The patient lay in bed weak and helpless. Often the greater part of the phenomena of the disease were of a favourable omen. One man whom I visited might be said to be right in every respect. His pulse, skin, and bowels, were natural. He ate heartily, and asserted that he was well. But there might be remarked a rapidity of speech, something odd in his manner, which in fevers of this country is a most fatal symptom. He became comatose the same evening, and died the next morning. Numerous instances of an analogous nature, though with some varieties in particular circumstances, have occurred to my observation. In fact, in many cases, but by no means in all, there might be distinguished with more or less exactness *three stages* of the disease. The first was the stage of fever, which lasted for an indefinite number of days, and gradually verged into the second, or stage of interval or remission, in which the patient often thought himself, and sometimes appeared to others, free from danger, if not from disease. This stage lasted also for an uncertain time, yet not in general for more than a few days; I have, however, seen it continue for a much longer period. During its existence, it was never difficult for an experienced practitioner to detect some circumstance incompatible with health; above all, in the look of the eye, the management of the voice, or the appearance of the tongue. The third stage may be called the stage of coma. It came on very suddenly, and quickly terminated in death. I have never known, or heard of an instance of recovery from even the incipient symptoms of this stage. So remarkable were these three stages, though not always referred to their true causes, that patients were often considered as dying of apoplexy, who in reality fell victims to fever. The intermediate occurrence of what I have called the interval, drew off the attention from the connexion between the early fever and the concluding coma, which must also be allowed in its symptoms to bear a perfect analogy to complete apoplexy.

"There were many cases, by far the majority indeed, in which the stage of interval did not appear: in place of it there was sometimes only an apparent amelioration of the disease. The patient seemed in a mending way; to be wearing out of the fever, as it is said, and to be free from any considerable danger. But all of a sudden, without any obvious cause, he became worse, and speedily fell into a coma, that in a few hours terminated in death." p. 13. *et seq.*

After stating, that the stage of interval was, in a very few instances, not followed by that of coma; but, instead of lasting for some days only, it was protracted for several weeks, and at last terminated favourably; the author says,—

"It is worthy of remark, that an affection apparently, as I hope to shew, of the head, may have the power of inducing a long train of lingering, and almost chronic symptoms, without the presence of any very violent action; and it may perhaps deserve inquiry, how far these ner-

vous and protracted fevers of our own country may not owe their duration and their obstinacy to something similar." p. 15.

Dr Irvine admits, however, that the early appearances of the fevers of Britain just mentioned, have little resemblance to those of the summer fevers of Sicily; which last, he observes, resist the ordinary degree of treatment in our island, in a surprising degree. But although this may be true, we are disposed to believe, that the principle is applicable, to a proportionate extent, to many of the fevers of this country, which, under the supposition of nervous debility, have been erroneously treated upon the tonic and stimulant plan. This plan, Dr Irvine is satisfied, is wholly inapplicable to the Sicilian fevers, however gently and judiciously conducted, or however its effects may be counteracted by the affusion of Currie, or the purgation of Hamilton.

Dr Irvine affirms, that, in the cure of these fevers, cinchona amply administered was of no sort of use in any stage; that wine and opium were at all times and stages pernicious; that antimonials, although their operation was not unfavourable, were productive of no positive benefit; and saline medicines had likewise very little effect. The use of purgatives he considers as decidedly beneficial; and the more frequently and effectually they were given, the more relief they afforded. "They neither stopped the fever, however, nor cured it; but they relieved, in a small degree, every bad symptom, and are deemed by the author indispensable to the proper treatment of fever. The two remedies which evinced the only decided powers in cutting short these fevers, were *blood-letting*, especially from the head, and the *cold affusion*; in aid of which, purgatives and blisters were serviceable. At first Dr Irvine attempted, according to the usual plan, to lead these fevers to a favourable crisis, but he soon found his inability to accomplish this purposse; which, together with the occurrence of two instances of fatal coma, led him to attend to the early affection of the brain, and to attempt to prevent its progress. "The disease certainly was not hydrocephalus, yet there was not wanting an analogy with that disorder in some instances." He, therefore, began the treatment, when the disease was not more advanced than the seventh day, by taking eight or more ounces of blood from the temporal artery, blistering the head, giving a dose of sulphate of magnesia, and applying the cold affusion. The bleeding never failed to relieve the headach and delirium; and the cold affusion always gave relief to the symptoms, and to the feelings of the patient. The bleeding and blistering were repeated according to the continuance or violence of the disease, and according to the effect produced; and he never desisted while any symptom of determination to the head was vi-

sible. After this relief, the cold affusion, which had hitherto given only transient relief, now appeared to have recovered its power. "Its application was generally followed by a regular improvement in the pulse, and diminution of the heat of the skin; and it was seldom necessary to have recourse to it many times before the fever was wholly extinguished." (p. 25.) With respect to the use of cold affusion, Dr Irvine justly states, that "no specific number of repetitions can be prescribed: *the body is, if possible, to be kept cool.* Sometimes one or two affusions in the day will suffice for that purpose: sometimes twenty will hardly be enough." (p. 30.)

The tediousness of convalescence was very remarkable, especially in those persons whose fever had not been interrupted in its course, by the treatment just mentioned. Sometimes several months elapsed before even a moderate degree of strength was restored.

The appearances on dissection, in those who died, were somewhat various, but generally confirmed the opinion of the chief seat of disease being in the head.

"In some cases, nothing very remarkable could be, or was discovered, in the brain or its membranes. In others, the cerebral veins were turgid with blood. In many, there was a red spot on the dura mater, about the middle of the longitudinal sinus, of the size of a dollar. Sometimes a little pus, or rather inflammatory exudation, appeared about this spot. Occasionally the convolutions of the brain were lined with a gelatinous matter, which probably consisted of serum included in cells of a fine membrane resembling the pia mater. In all these cases, we have good ground to infer the existence of excessive action at one period of the disease; and in some we can even discern the cause of the comatose state."

None of these fevers appeared to the author to be contagious, nor could he ever observe any thing like the tendency to change on certain days, described by Hippocrates. The practice of that ancient physician, however, which consisted of bleeding from the arm, shaving the head, and applying cold to it, and administering glysters, approaches nearly to what the best inquiries of our own times have brought us to adopt. Had he followed the hint, which he often observed, that a bleeding from the nose and ears, in fevers, often preceded a solution; and had he overcome that aversion for purgatives, which the drastic and unmanageable nature of his active cathartics probably inspired, he would doubtless have been more successful.

Sometime about September, the author observes, in beginning his *fourth* chapter, the fevers of Sicily begin to assume a lower type: they are attended with rather more shivering; the headach is less violent; the face less flushed; and the tongue

yellower. The pulse does not continue strong for so long a period; and symptoms of debility come on earlier. A great many of those who are most violently affected, become excessively yellow, without any alleviation of their disorder: the stomach is more irritable than in the summer fevers, and a sort of diarrhœa is often present. The vomiting is bilious, and of a dark green colour; but never black, as far as the author observed. Sometimes the liver is tender, but not frequently, nor considerably so. These fevers occasionally run out to a great length, without often showing any thing like the *interval* mentioned in the preceding chapter; but the patients sometimes die suddenly with apoplectic symptoms. Dr Irvine thinks they differ from the former class of fevers, most particularly in the more rapid appearance of debility: but he affirms, that when the patient is seen early enough, there has always been headach, flushing of the face, redness, or at least wateriness, of the eyes, and beating of the carotids; symptoms all indicating a determination to the head. (p. 45.) It cannot be doubted, however, we apprehend, that the biliary system is also considerably deranged in these fevers. Nevertheless, as yellowness is not a constant symptom, (Hippocrates thought it a good symptom after the seventh day); and as Dr Irvine says, "it does not appear that fevers without yellowness are at all safer than those with it," or, of course, more deleterious, we may conclude with him, that this symptom is not connected with the essential or dangerous part of the disorder.

"Whether the earlier debility," he observes, "arises from the more violent action on the brain," (Is there any evidence of the occurrence of more violent action?) "or from some other cause, I will not presume to determine: but I can safely state, that the same sort of treatment which I have used in the summer fevers, also proved successful in these. The effect of remedies was not exactly the same in the two. General bleeding was not so useful, and much less frequently extinguished the disease, in the autumn. The necessity of purging was much greater. I have also remarked, that the topical treatment of the head sometimes extinguished danger, when, from being used after the fever had been established for some days, it could not extinguish the disorder. Under the evacuating system, boldly pursued and well directed, I have often seen the symptoms of debility diminish and vanish; and never yet have I witnessed any bad effect from it. To this moment, indeed, I have lost no patient in fever treated upon the topical plan as early as the third day, or even the fourth." p. 45.

Dr Irvine speaks of a remarkable swelling of the parotid glands, which, in spite of all treatment, goes on to suppuration; and so far from being of a critical nature, as it was esteemed by ancient authors, it terminated fatally in *all the cases* witnessed

by the author. (p. 44.) "In the two most remarkable cases of this sort," (p. 46.) the patients were apparently in a convalescent state when these fatal tumours began to appear, and the fever recurred with more than its original violence. One of these patients, who was treated first with leeches, cold application, and purges, then with poultices and fomentations, and afterwards with bark, wine, and opium, died comatose. The other, treated by section of the temporal artery, and other evacuations topical and general, also died, but not comatose. The brain, after death, was found fuller of venous blood than natural.

Dr Irvine is perhaps not quite consistent with himself in one point. After having informed us, in the outset, that these fevers are constantly multiplied by the circumstances which give rise to miasmata, and that the connexion of stinking effluvia with fatal fevers is notorious among the people, he now says, (p. 48.)

"As to the connexion of this sort of fever with marsh miasmata, I am at a loss what to say. It is by many considered as a remittent fever. I do not pretend to decide the point: I am more disposed to regard heat and miasmata as frequently concurring in different relative degrees of force to produce fevers. It is certain, at any rate, that the Sicilian autumnal fevers were cured without bark; and that, in very many instances, (by far the greater number), no appearance of any intermission or remission was visible."

He is of opinion, however, that these fevers are not infectious; although he is not so decided on this point in regard to the autumnal, as to the summer epidemic.

When these fevers become fairly formed, and therefore run their course, he says, they do not seem to be much influenced by any method of treatment: but he thinks that calomel and James's powder were of some use; probably by occasioning gentle and continued purging. We could have wished that the author had given us some account of the alvine excretions, in these autumnal fevers; as we are persuaded that the variations of the feces afford the most important indications, as to the administration of purgatives, on the one hand, and to the time when the use of the bark or other tonic may be advantageously commenced, on the other; especially in those fevers which are accompanied with yellowness of the skin, and other obvious proofs of the disordered state of the hepatic system. But on this subject the author is silent. He states, in rather vague terms, that "touching the mouth with mercury is sometimes useful in cases where the yellowness is great; but it is prejudicial early in the disorder." He is not satisfied that bark, wine, and opium, which were commonly administered in the protracted stages of the disease, were ever of much benefit; but he admits, that in this opinion he may

be somewhat influenced by prejudice; and, from having accustomed himself to regard the early arresting of the course of fevers as the great object of medical practice in these diseases, he may have attended too little to the more uncertain benefits of other modes of treatment in the after stages. That the early application of active remedies is the most effectual mode of subduing fever, every practitioner will allow; but we think that experience will by no means sanction that sweeping inference which our author is disposed to take up, that subsequent treatment will not materially alter both the duration and the degree of severity of fevers. In the fevers of this country, it most assuredly will: and it is perhaps sufficient to mention the fact, of which we have witnessed numerous instances, that a total change of symptoms, from delirium, with frequent small pulse, ferrety eyes, black tongue, great prostration of strength, &c. to perfect self-collection, and an amendment of all the other circumstances, has been produced at once by removing the patient from a filthy and ill-ventilated apartment, to the airy and cleanly ward of an hospital; and a speedy recovery has ensued, which could not have been expected, had this amelioration of the condition of the patient not been thus produced. We believe, indeed, with our author, that when, by proper evacuations, the local affection of the head or of the abdominal organs has been removed, very little bark or other medicine is required, in general, to restore the constitution to its wonted vigour.

Dr Irvine concludes this chapter with a well detailed case, treated by his friend Dr Farrell, illustrative of the benefits of the active evacuations in the commencement of these fevers. In the ensuing chapter, in which he treats of the *winter fevers*, he merely states, that they generally run a mild course, very analogous to that of the ordinary cases of synochus in England, although they sometimes assume a malignant type, and imitate the fevers of summer and autumn; and that they hardly ever fail to yield to the four grand means of cure, topical bleeding, blistering, cold affusion, and purging; and require less activity of treatment, than the other fevers. He observes, that, on the one hand, the cold affusion is not permanently beneficial, until the morbid action in the head is removed by evacuations; and, on the other, that when this topical affection is removed, the fever, though always mitigated, does not necessarily subside, but requires the cold affusion, in many instances, for entirely extinguishing its force. And thus he thinks an obstruction to the successful employment of the cold affusion, of which Dr Currie was not aware, is easily done away.

With respect to the section of the temporal artery, which has

been deemed a dangerous operation by some practitioners, Dr Irvine makes the following remarks.

"I have, I am sure, ordered the section of the temporal artery to be performed at least three hundred times, and I never saw any accident, however slight, occur but once, and that was merely the loss of a very few ounces of blood during the night, by which the patient was much benefited. This arose from the artery not being cut across after the operation, which effectually prevents any danger. The artery may be opened either with the lancet or scalpel, but the latter is best. By judiciously selecting the part to be cut, it may be opened several times on each side without any inconvenience: and the cases are very few indeed, so few as to be unworthy of consideration, in which a great deal of blood may not be obtained by a dexterous operator from some part of the head." p. 63.

In the *sixth* chapter, the author briefly, and with becoming caution as to the use of hypotheses and analogical inferences in scientific inquiries, suggests the probable advantages of this practice in other climates. In the propriety of this suggestion we acquiesce to a considerable extent; since every day's experience has tended to confirm the notion, that many of our own fevers, which are characterized by a typhoid disposition, but in which the functions of the sensorium are disturbed, or other obvious marks of congestion, or disordered vascular action in the encephalon occur, are allowed to pass into the typhoid type from an omission to remove that morbid condition of the head, by local evacuants, in the outset. Indeed, although there may be a multitude of routinists, who continue to apply wine and bark as soon as they hear the word "fever," we are sure that no thinking and observing physician now employs those medicines in the early stages of *any fever*, in this country: and we are equally persuaded, from observation, that, if the prejudices of education, and the shackles of hypothesis in regard to the nature of debility, were cast away, the same medicines would be shunned, even in the late stages of typhoid fevers, wherever delirium and restlessness, accompanied with flushed countenance, and suffused and ferrety eyes, occurred. Nevertheless, that there are fevers, which may be strictly termed *gastric* fevers, in which the head suffers only by sympathy with the stomach and hepatic system, and which are to be cured by remedies operating upon these organs only and directly, we think observation will also evince, at least in this country. It is in these, perhaps, more particularly, that the necessity of full and repeated purging is evinced by the striking benefits which result from it, as depicted by Dr Hamilton. Dr Irvine strongly, and we are disposed to believe, very justly, recommends the consideration of this plan of topical evacuation to

his brethren within the tropics, with a view to the early suppression of the yellow fever.

Intermitting and remitting fevers form the subject of chapter seventh, and are discussed with brevity, but elicit some interesting practical remarks. Intermittents are very common in Sicily in the autumn, and seldom fatal. The cinchona appeared to be the most effectual remedy; but arsenic and the sulphate of zinc were also powerful agents; and little or no previous evacuation was required. If the pulse was strong, the face flushed, and more headach than usual occurred, with a sense of heat in the stomach, the sulphate of zinc, given in doses of a grain and a half every two hours during the intermission, was more successful than the bark. "It seemed to remove the inflammatory diathesis, and often cured the fever alone." In all cases it rendered less bark necessary. Dr Irvine found few fevers that resisted the action of arsenic for more than three days, and never saw any ill effect from it. He remarks, however, that there is a great deal of idiosyncrasy in these diseases. One man will be cured sooner by bark, another by arsenic, and a third by sulphate of zinc: whence the author seldom continued the use of any one of these more than two days, unless obvious advantage was derived from it.

With respect to remittent fevers, they are much less manageable by medicine. In some cases, which occur in the summer, bleeding suddenly converts them into intermittents; but the autumnal remittents will not bear this treatment, unless very early used; the symptoms of debility soon ensue. "The most beneficial practice in such a state," the author observes, "has, according to my experience, consisted in active purging, which is of the greatest benefit. Cinchona is of little service, unless in pretty clear remissions. Wine in the latter stages cannot be refrained from." p. 78.

The eighth chapter, which relates to dysentery, contains a good account of that disease; but little novelty in respect to the treatment. On the whole, Dr Irvine does not seem to have been sufficiently aware of the value of opiates, *combined* with purgative medicines; although the case of Champion, which he relates, and which resisted the free use of the latter for a long time, and yielded only when opium was likewise administered, affords a striking example of the fact. (p. 88.) He justly remarks, that scybala are by no means constantly or even frequently discharged in dysentery, and therefore cannot be deemed the cause of the disease. He recommends oil of turpentine, applied to the abdomen in flannel, as a rubefacient, for the purpose of removing the pain and tenderness of the abdomen; and anodyne glysters,

with a drachm and a half of tincture of opium, and four ounces of starch mucilage, which may be repeated three times a-day, as affording much relief to the bowels.

Phthisis is very common and very fatal in Sicily, where it is generally believed, but apparently without any foundation, to be contagious. Nevertheless the author affirms, that if the phthisical "patient is careful to guard against the heat of the summer, by remaining within doors in the middle of the day, and to provide against the chilliness of the colder season, by preparing a house for his own accommodation, not forgetting a fire-place or stove, he will find the Sicilian climate, if not the best in the world, at least greatly more congenial to his frame than the fogs and rains of England, the effects of which no care can entirely prevent." p. 90.

In chapters tenth and eleventh we have some brief observations relative to *hepatitis* and *rheumatism*. The chronic hepatitis is more common than the acute. A morbid state of body, connected with hepatic derangement, in which the patient is sallow, weakly, loses his appetite, has a foul tongue, and is costive, and sometimes slightly feverish in the evening, occurs in the end of summer, and is speedily relieved by daily and smart purging, by means of which an immense quantity of bile is carried off. The sulphate of zinc is sometimes combined with the cathartics with advantage in this complaint. Rheumatism is one of the most common diseases in Sicily, and nearly as obstinate as in this country. The chronic disease yielded most readily to mercury, which was introduced into the system by friction; and bark was found of little service, except where there was great debility and emaciation from other causes. The warm bath was in general "of wonderfully little use" in this form of rheumatism.

The work is concluded by some observations on the medical use of *borax*, and on *erysipelas*, which compose the twelfth chapter. A solution of borax, in the proportion of half a grain to an ounce of water, is considered by the author as a most effectual remedy for the ulceration which takes place behind the ears of children, and which solutions of lead do not cure. We should be disposed, however, to doubt the permanency of such a cure; since the disease has generally appeared to us to be in some measure constitutional, and to yield readily to small doses of mercurials, acting gently upon the bowels daily, independently of any particular local application. Dr Irvine found, that this boracic solution was altogether useless, when applied to the inflammation of the pudenda in children, which he had conceived to be an analogous complaint, and which yields readily to a weak solution of acetate of lead.

The purport of the author's observations on erysipelas, is to defend the practice of applying refrigerant lotions to the skin in that disease, especially weak solutions of lead. This practice is also commended by other writers; * and, for our own parts, we have been in the constant habit of employing cooling lotions, such as equal parts of aq. ammoniæ acetatæ and water, &c. in erysipelatous inflammation, with great benefit, and with immediate relief to the feelings of the patient, which the application of farinaceous powders most commonly aggravated, or failed to relieve: but very able surgeons deprecate the indiscriminate use of them. † Dr Irvine has not found the saturnine solutions of any advantage "in the *zone* which surrounds the waist, and is accompanied with a pustular eruption." The term *vesicular* eruption would have been more correct; for such it invariably is in the first days of the disease: and as to shortening its course, we believe it were as easy to abbreviate the duration of the small-pox: it will only terminate at its usual period. ‡ It is properly a *herpes*, and not an erysipelas.

On the whole, this little volume is entitled to a considerable share of praise. It is obviously the work of a man of independent mind, who views disease with a clear and unwarped understanding,—nullius addictus jurare in verba magistri. The disposition to generalize too readily from a few striking cases, is a fault into which all men are more or less liable to fall, and which we cannot but suspect that our author has not always avoided. But we think that the general principles upon which he commonly proceeds, are such as all men of unbiassed observation are every day concurring to adopt; and that they cannot be too often or too strongly urged upon the attention of the profession at large; among many of whom it is painful to observe the rooted abhorrence of gratifying the calls of nature and instinctive sensation, the constant fears of repulsion and metastasis, of obstructing excretions and interrupting discharges, which have no better foundation than ancient hypotheses, which they would now blush to defend.

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* See Cooper's Dictionary of Practical Surgery, and also his First Lines of the Practice of Surgery.

† See Pearson's Principles of Surgery, Chap. x. Sect. 4.

‡ See Edin. Med. and Surg. Journal for April 1811. p. 239.

II.

Consultations de Medecine, de M. BARTHEZ, Medecin de sa Majesté l'Empereur, et du Gouvernement; et des MM. BOUVART, FOUQUET, LORRY et LAMME. à Paris, 1807. 2 tomes 8vo. pages 1040.

A celebrated physician, such as Barthez was, after passing a long life in successfully teaching and practising his art, could not perhaps bequeath a more acceptable and useful legacy to posterity, than a record of his consultations, dictated in the spirit of those now before us. This is indeed a mode of diffusing medical instruction, which we should be well pleased to mention more frequently. It seems to us to stand in the same relation to general systems of medicine or monographs, that clinical lectures do to systematic discourses of practical medicine, and to have the same advantages in point of instruction. We follow the veteran practitioner into the bed-rooms of the sick, and deliberate with him in his closet, on their respective cases, and thus become familiar with his diagnostics, his indications, and his peculiar practice.

The consultations of Barthez lose somewhat of their intrinsic value to the English reader, from the pathological language in which they are couched, conveying views and opinions not quite orthodox, and from the frequent prescription of numerous simples deemed by us inert, and not only banished from our practice, but expunged from our pharmacopœias. Yet these consultations are evidently dictated by a great master in the art. And we think them peculiarly interesting as models of careful deliberation, well worthy the imitation of others. The case submitted to him is minutely considered, and his general opinion of its nature and tendency fully exposed; the indications for conducting the cure, and the future treatment of the patient, are next perspicuously delivered. In doing this, he anticipates also those changes which may take place in the course of the disease; and he provides, accordingly, for all the probable varying circumstances of the case.

The consultations are necessarily long; a circumstance which we regret, only because it interferes with what we intended, a translation of one or two of them, for the satisfaction of our readers. We shall, however, select the shortest, as a single specimen of his manner. It is entitled, "Premature Puberty, fol-

lowed by suppression; melancholic affections; palpitations of the heart."

"The young lady who has done me the honour to solicit my advice, is in her thirteenth year, and of a melancholic temperament. The catamenia appeared at the age of eight years; and she continued to menstruate periodically, for five successive months. She was then plump, and her breasts well developed. Being sent to a convent, she became hypochondriac in an alarming degree, and from that time began to be sensible of slight palpitation of the heart. These symptoms, at first neglected, became daily more serious; to the suppression of the menses succeeded a purulent leucorrhœa; and now the palpitation of the heart has become violent, and even audible at a certain distance, and accompanied by visible throbbings of the carotids.

"She complains of pains of the stomach; is dreadfully emaciated, and her face is bloated. She is extremely feeble, and can scarcely crawl from one room to another; nothing interests or amuses her; she is subject to febrile paroxysms; she coughs a good deal through the day, but still more when a-bed. The beginning of this disease was the suppression of the menses after a premature appearance of them. The unhappy circumstances connected with her confinement to a convent, occasioned this suppression, which was succeeded but not replaced by a leucorrhœal discharge of a bad quality. Then the heart became powerfully affected; 1st, because it had to sustain, more than any other organ, the violent effects of the passions of the mind, of the spasms of the uterine vessels, and of the surcharge of blood which these vessels should have evacuated; 2dly, because, at this tender age, it was too weak to resist such powerful impressions.

"This disease of the heart having been neglected, seems to have become extremely alarming. It is scarcely probable that it can have subsisted for three or four years from a cause purely nervous, and without having induced an aneurism, or some other organic lesion of the heart. In this case, we *can* expect to do little more than to check its progress by an appropriate regimen, and palliative method of cure. Still, however, if this lesion of the heart consist in a lesser degree of dilatation, and equally affecting its different parts proportionally, it might be possible, with time, and the re-establishment of the catamenia, to restore the heart to its natural state.

"But if we may flatter ourselves that success shall attend the treatment directed to the disease of the heart, it can only happen in so far as we shall be enabled to cure the nervous consumption with which it is complicated. The affections of the mind and body which accompanied the interruption of the menses, have pro-

dicted this consumption, which is well characterised by the extreme emaciation, the prostration of strength, the stomach complaints, the hectic paroxysms, &c. Even if the disease of the heart should not prove immediately mortal, there is reason to fear lest this consumption may terminate by suppuration of the lungs, inasmuch as she has a mucous and purulent discharge from the vagina, and is actually afflicted with a cough. This cough may indeed be occasioned, or at least aggravated by the difficult passage of the blood through the pulmonary vessels, in consequence of the organic lesion of the heart; and this obstruction in the circulation, will also account for the puffed and bloated appearance of the face; the return of the blood by the vena cava superior being retarded.

"The indications which offer themselves are, 1st, to obviate the violent agitation of the blood and humours, and to moderate the habitual convulsive motion of the heart, by favouring the natural excretions, by lessening the plethora, and by the use of refrigerants and antispasmodics; 2dly, to combat the nervous consumption, by a persevering use of an antihectic regimen, and of strengthening remedies, which ought to be managed with much prudence; 3dly, if we succeed in any great degree, in reestablishing the constitution, to endeavour to restore the menstrual discharge.

"1st, We must endeavour to preserve a free state of the bowels and skin. The patient should every morning take a *lavement* of warm water; and if that do not sufficiently answer the purpose, she should take at convenient intervals, acidulous and saline purgatives, such as tamarinds, cream of tartar, Epsom salt.

"To promote perspiration, gentle exercise in a carriage, daily and gradually prolonging the length of the rides, will be useful. Care must be taken to avoid cold. If occasionally there occur more frequent attacks of fever, increased palpitation of the heart, and other symptoms referable to an increase of plethora, relative to its organism, recourse must be had to small blood-lettings, four or five ounces for example, and repeated according to the pressure of the indication, to remedy immediate danger connected with the disease of the heart: In repeating these blood-lettings, however, attention must be paid to the contra-indication presented by the state of the patient's strength.

"For a long time, the patient will take daily, two ounces of well clarified whey, to which are to be added a drachm of nitre, and two ounces of the distilled water of the flowers of the gallium verum, (caille-lait). She will take as drink in the course of each day, several glassfuls of a decoction of orange-leaves, pre-

pared by boiling a large handful of those leaves, in three pounds of water, till one half is consumed.

"When the attacks of palpitation are most violent, she may experience relief from drinking balm tea; to each cupful of which must be added a few drops of Hoffman's anodyne mineral liquor. If sleep be prevented by the palpitations, the cough, or other irritations during the night, she should be directed to bathe her feet in warm water before going to bed, and take a dose of softening anodyne emulsion, prepared by expression from the greater cold seeds, and those of the white poppy, the decoction of the roots of the nymphæa, and the syrup of the papaver erraticum; but she must refrain from narcotics.

"The patient must live temperately, still, however, in a manner that shall not increase the debility, but on the contrary, so as gradually to raise her strength if possible. Her daily nourishment should be divided into several meals. She must avoid all food which is heating, or of difficult digestion, and all hot and spirituous drinks. Her supper should be very light, and she should not go to bed till two or three hours afterwards. It would be proper that she confine herself chiefly to a vegetable regimen, and the liberal use of sorrel, cresses, and other pot-herbs abounding in acid or nitrous salts.

"After persevering a sufficient time in the use of the sedative and antispasmodic remedies prescribed, you may combine with them tonics, which must still be given with much reserve, and by slow increases. The first of these will be the bark, after each dose of which, she should take whey, chicken broth, or other demulcent drinks, to which a little nitre may be added: for the same purpose, she might also use any light bitter stomachic infusion, a decoction of santal, &c. The patient should be amused, and her mind diverted from the melancholic ideas with which she is affected; above all, strong emotions, so hurtful to persons attacked with palpitations, should be carefully avoided.

"If the foregoing remedies are attended with the hoped success, recourse should then be had to various means for restoring the flow of the menses: In case they should not return as the constitution improves, then small blood-lettings may be practised from the foot, and repeated according to circumstances.

"Their flow may also be assisted by warm pediluvia, and fumigations with aqueous vapour; a plaster of galbanum should be kept constantly applied to the soles of the feet. On discovering the cause which continues to oppose the return of the catamenia, it will become necessary to oppose the appropriate remedies, aperitives, and antihysterics; but it will be prudent to refrain from emmenagogues, and stimulants."

It is to be regretted that we are generally left ignorant of the termination of those cases which are the subjects of consultation: the histories are thus incomplete, and we have not the satisfaction of knowing the effects of the advice and prescriptions given. This was, however, most likely unavoidable. Barthez appears generally to have been consulted by writing. His answers were therefore full, and methodical; but in most instances, he would hear no more of his patients.

It is one advantage of this collection, which in some measure reconciles us to this desideratum, that the cases are not mere memorabilia, selected because they are curious, or rare, and uncommon. They are generally ordinary cases, of daily occurrence. For the purposes of clinical instruction, we deem this an advantage; and we have often thought our clinical teachers erred in their anxiety to select the most uncommon, curious, or complicated cases which the hospital presents for the instruction of their pupils.

III.

Illustrations of Madness; exhibiting a singular Case of Insanity, and a no less remarkable Difference in Medical Opinion; developing the Nature of Assailment, and the Manner of Working Events; with a Description of the Tortures experienced by Bomb-bursting, Lobster-cracking, and lengthening the Brain. Embellished with a curious Plate. By JOHN HASLAM. 8vo. pp. 81. London, 1810.

JAMES TILLY MATTHEWS, whose case has given rise to this curious publication, was admitted a patient into Bethlem Hospital, by a petition from the parish officers of Camberwell, on the 28th of January 1797. Although his insanity was then most evident, yet his relatives did not possess the faculty of perceiving his disorder. After one year's residence in the hospital, he was put upon the incurable establishment; and in this situation he has continued till the present time. In the year 1809, his relatives again interfered; and confiding in their own opinion, that he was of sound mind, and possessed the proper direction of his intellects, requested that he might be discharged.

They applied to two very respectable physicians, Drs Birkbeck and Clutterbuck, to visit Mr Matthews, who pronounced him perfectly recovered, and affirmed the same on oath in the Court of King's Bench. The medical officers of Bethlem Hospital considered this patient insane, and they assembled a consultation of the most eminent men of the Royal College, who, after a deliberate examination, made oath, that he was in a most deranged state of intellect, and wholly unfit to be at large.

We shall not step out of our department to inquire into this remarkable difference in medical opinion, especially since a counter-statement of the affair has been advertised by one of the dissentient physicians. Until that rejoinder has been read, it would be wrong for us to say more, than to express a hope, that the controversy will be carried on with less acrimony than what is already displayed in the beginning. For surely madness can be illustrated, without speaking disparagingly of doctors of physic.

That Mr Matthews labours under mental derangement, or, in other words, that he is mad, there can be scarcely a doubt in the mind of any man who is in his sober senses, and is unbiassed and undeceived by prejudice. This unfortunate maniac seems to be affected with the morbid habit of watching his own sensations so closely, and he sees every thing through the discolouring and distorting glass of his disordered imagination, that he has brought on a train of diseased feelings, and endures thereby the actual suffering which he describes, from an imaginary cause. His peculiar opinions may be judged of by the following extract. Some of the history is faithfully copied from the manuscript of the patient himself; and the whole is said to have been collected from him since the termination of the legal proceeding.

"Mr M. insists, that in some apartment near London Wall, there is a gang of villains, profoundly skilled in pneumatic chemistry, who assail him by means of an air-loom. A description of this formidable instrument will be given hereafter; but he is persuaded that an account of it is to be found in Chambers's Dictionary, edited by Dr Rees in 1783, under the article *Loom*, and that its figure is to be seen in one of the plates relating to Pneumatics.

"It is unnecessary to tell the reader, that he will fruitlessly search that work for such information.

"The assailing gang consists of seven members, four of whom are men, and three women. Of these persons four are commonly resident, and two have never stirred abroad since he has been the subject of their persecution. Of their general habits little is known. Occasionally they appear in the streets; and by ordinary persons would be taken to be pickpockets or private distillers. They leave home to correspond with others of their profession; hire themselves out as spies; and discover the secrets of Government to the enemy, or confederate to mark events of the most strenuous

nature. At home they lie together in promiſcuous intercourſe and filthy community.

"The principal of this crew is named Bill, or the King: he formerly ſurpaſſed the reſt in ſkill, and in the dexterity with which he worked the machine: he is about 64 or 5 years of age, and in perſon reſembles the late Dr De Valangin, but his features are coarſer; perhaps he is a nearer likeneſs to the late Sir William Pulteney, to whom he is made a duplicate. It was on account of ſomething worked by this wretch, that another, by the force of *aſſailment*, actuated Rhynwick Williams to the commiſſion of his monſtrous practices. He alſo took Hadfield in tow, by means of magnetic impregnations, and compelled him to fire the piſtol at his Majeſty in the theatre: but on this ſubject there is a difference of opinion, as ſome of the female part of the gang attribute this event to *Blue-mantle*, of whom nothing farther is known. In working the machine, Bill exerts the moſt unrelenting and murderous villany; and he has never been obſerved to ſmile.

"The next in order, is a being called *Jack the ſchoolmaſter*, who is the ſhort-hand writer to the gang: he ſtyles himſelf the recorder; ſomewhat tall, and about ſixty years of age. It is not well aſcertained if he wear a wig, but he generally appears in the act of ſhoving his wig back with his forefinger, and frequently ſays, "ſo you ſhall, when you can ketch (catch) us at it." Sometimes he ſays, "I'm to ſee fair play," and makes a merriment of the buſineſs. Jack has very ſeldom worked the machine.

"The third perſon is *Sir Archy*, who is about 55 years of age, wears a drab-coloured coat, and, according to the old faſhion, his breeches button between the legs. Some of the gang aſſert that Sir Archy is a woman dreſſed in men's apparel: and whenever Mr Matthews has endeavoured, by inquiry, to aſcertain this fact, Sir Archy has anſwered in a manner ſo quaint and indelicate that I cannot venture to communicate his reply. He is conſidered as the common liar of the gang; a low-minded blackguard, always cracking obſcene jokes, and throwing out gibes and ſarcaſms. In his ſpeech there is an affectation of a provincial accent, ſo that when Mr M. aſſerts the truth of any fact, Sir Archy replies, yhe (you) are miſteaken (miſtaken.) He conſtantly ſtays in the apartment, and ſays he does not work the machine, but only uſes a magnet. His mode of communicating with Mr M. is principally by "*brain-ſayings*," which term will be afterwards explained.

"The laſt of the males is termed the *Middle Man*, who is about 57 years of age, of the middle ſtature, with a broad cheſt; has a twang of the hawk countenance, not pockfretten, and much reſembling the late Mr Smeaton the engineer. He is dreſſed in a blue coat, with a plain waiſtcoat. It is ſaid that he is a manufacturer of air-looms, and poſſeſſes the firſt-rate ſkill in working this inſtrument. Although he is unrelenting in his perſecution of Mr M., he appears to conſider it as ſport, and ſits grinning, apparently delighted that he cannot be taken unawares. After his attacks, he generally obſerves that Mr M. is the taliſman; then Sir Archy replies with a ſneer, "Yes, he is the taliſman."

"Among the females who compose this establishment, *Augusta* may first be described. She is about 36 years of age, of the middle stature, and her countenance is distinguished by the sharpness of its features. In person she is not fleshy, nor can she be said to be a thin woman; she is not full breasted. Ordinarily dressed, as a country tradesman's wife, in black, without powder. Augusta seldom works the machine, but frequently goes abroad to correspond with other gangs at the west end of the town. Of agreeable deportment, and at first seems very friendly and enjoling; but when she finds that she cannot influence and convince, becomes exceedingly spiteful and malignant. Her object is to influence women by her brain-sayings; and she states herself to be the chief of this department. Within the last seven years the virulence of her temper has been considerably exasperated.

"*Charlotte*, the next in review, is about the same age as Augusta, and also of the middle stature, but more fleshy; has the appearance of a Frenchwoman, being a kind of ruddy brunette. She constantly says at home with Sir Archy, and complains that she is forcibly confined to this situation. They keep her nearly naked, and poorly fed. Mr Matthews is led to suppose that she is chained; for she has sometimes stated herself to be equally a prisoner with himself. Charlotte always speaks French, but her language and brain-sayings are conveyed in an English idiom. Her character is that of a steady, persevering sort of person, who is convinced of the impropriety of her conduct, but cannot help herself. For several years she has not worked the machine, but is a fixed and established reporter.

"A very extraordinary lady completes this malicious group. She does not appear to have any Christian name, but by the gang is termed the *Glove-Woman*, as she constantly wears cotton mittens. Sir Archy drily insinuates that she keeps her arms thus covered because she has got the itch. She is about 48 years of age, is above the middle height, and has a sharp face. On her chin and upper lip there is a considerable quantity of fine downy hair, and she is somewhat pockfretten. Always dressed in a common fawn-coloured Norwich gown, with a plain cream-coloured camblet shawl, and wears a chip hat covered with black silk. The glove-woman is remarkable for her skill in managing the machine. She frequently goes abroad. The rest of the gang, but particularly Sir Archy, are constantly bantering and plucking at her, like a number of rooks at a strange jack-daw: she has never been known to speak."

IV.

Observations on the Effects of Magnesia, in preventing an increased formation of Uric Acid, with some Remarks on the Composition of the Urine. By Mr W. T. Brande, F. R. S. *(From the Philosophical Transactions for* 1810. *Part I.)*

On Cystic Oxide, a new species of Urinary Calculus. By WILLIAM HYDE WOLLASTON, M. D. Sec. R. S. *(From the same work. Part II.)*

HAVING in a former paper set forth the differences of urinary calculi, and the effects that are produced upon them by the use of solvent medicines, * Mr Brande has resumed his inquiries, with the practical aid of Mr Home; and the first of these communications contains the result of their joint labours. Alkalies taken internally were supposed to operate by neutralizing the uric acid before its concretion in the bladder, but Mr Brande showed by experiment, that they produce no direct influence on the calculi; he was therefore induced to seek for some other substance capable of preventing the formation of uric acid, and magnesia was the remedy fixed upon for trial. It was found, by a very careful examination of the urine, that in several instances where there was an increased formation of uric acid, magnesia diminished it in a greater degree than had been effected by the use, and that a very liberal one, of the alkalies in the same patient.

Four cases are related as examples of the principal varieties of the disorder which have been treated in this manner, and in each of them the urine was occasionally carefully analyzed. The first is that of a gentleman sixty years of age, who had been in the habit of indulging in the free use of acid liquors, had repeatedly passed small calculi, composed entirely of uric acid; his urine at all times deposited a considerable quantity of that substance, in the form of a red powder, and occasionally in larger crystals. He took subcarbonate of soda and of potash, with little diminution of his complaint. He was directed to take fifteen grains of magnesia three times a-day, in an ounce and half of infusion of gentian: in a week the uric acid was found, by examining the urine, to have diminished in quantity, and after the first three weeks it was only occasionally met with. The use of magnesia was persevered in for eight months, during which time no calculi were voided, nor was there any material deposite in the urine. The patient got rid of heart-burn and a sense of weight and uneasiness in the stomach, to which he was extremely subject. The second case is that of a gentleman about forty years of age, who had, during four years, occasionally voided considerable quantities of uric acid, in the form of red sand, and had once passed a small calculus. His urine was generally more or less turbid, and after taking any thing which disagreed with his stomach, even in a slight degree, the red

* *Vide* Phil. Trans. for 1808, and Vol. V. of this Journal.

sand often made its appearance. He took twenty grains of magnesia in a little water, every night and morning, which disordered his bowels at first, but they soon became regular, and by persevering in the use of this medicine for six weeks without intermission, he got quite well. Another gentleman, forty-three years of age, after taking violent horse exercise, was seized with pain in the right kidney and ureter, and, in the course of the night, passed a small uric calculus. His urine was turbid, and deposited red sand. In consequence of these symptoms, he was directed to take twenty grains of magnesia every night. The quantity of uric acid in the urine was soon diminished, and that secretion became perfectly healthy. The fourth case is that of a gouty patient, aged fifty-six, who voided a large quantity of mucus and red sand in his urine, but never a calculus. His stomach was weak, and he was often affected with heart-burn and pain in the neighbourhood of the right kidney. He had taken spirituous tinctures, and the alkalies, without experiencing any benefit: hence, like all gouty patients, he readily acceded to a new plan of treatment, and took twenty grains of magnesia three times a-day in water, but that affected the bowels too much; therefore he was directed to take the same quantity of magnesia twice a-day only, with five drops of laudanum to each dose.

After taking the magnesia for six weeks, the urine was less loaded with uric acid and mucus, and the patient had a longer interval of ease from gout, than for six years past.

The different effects of magnesia, and the alkalies, in these four cases, led Mr Brande to make some experiments, with a view of ascertaining their comparative influence on healthy urine.

"*Experiment I. On Soda.*

"Two drachms of subcarbonate of soda were taken on an empty stomach at nine o'clock in the morning, dissolved in three ounces of water, and immediately afterwards, a large cup of warm tea.

"In six minutes, about one ounce of urine was voided; in twenty minutes six ounces more; and after two hours a similar quantity.

"The first portion became very turbid, within ten minutes after it had been voided, and deposited a copious sediment of the phosphates, in consequence of the action of the alkali upon the urine. It slightly restored the blue colour to litmus paper reddened with vinegar: the alkali, therefore, was not merely in sufficient quantity to saturate the uncombined acid in the urine, and consequently to throw down the phosphates; but it was in excess, and the urine was voided alkaline.

"The urine voided after twenty minutes, also deposited a cloud of the phosphates; but the transparency of that voided two hours after the alkali had been taken, was not disturbed.

"Here, therefore, the effect of the alkali upon the urine, was at its maximum, probably in less than a quarter of an hour after it had been

taken into the stomach, and in less than two hours the whole of the alkali has passed off." p. 143.

In similar experiments with potash, the results were in all cases as similar as could be expected in reseaches of this nature. Magnesia, taken even in large doses, produced a much slower and smaller precipitation of the phosphates than the alkalies; and on this our author concludes its value as a remedy in calculous disorders, seems materially to depend. Lime-water produced little or no effect, and the carbonate of lime still less. Urine voided an hour after drinking twelve ounces of water very highly impregnated with carbonic acid, was found to contain a superabundant quantity of that gas.

Such are the principal facts contained in Mr Brande's paper.—"*Operi incipienti favendum.*" We are unwilling to damp the hopes which these experiments seem to encourage; but it would be shrinking from our duty to conceal our opinion, which is not so favourable as that of some contemporary journalists. We do not think that these experiments furnish very strong grounds for expecting that the difficulties of preventing or curing even one species of stone in the bladder, the uric acid, are overcome. Every newly tried remedy is always reported to be carried to the bladder *unchanged*, although the middle passage from the stomach to the bladder has not yet been discovered; yet Mr Brande's experiments are far more accurate and conclusive than those of Percival, Saunders, Rutty, and other earlier experimentalists on this subject. The cases in which magnesia was administered with such benefit, are examples of that form of the disease in which there is a disposition to secrete uric acid in excess, and to void small calculi. What is meant by stone in the bladder, is a different and more serious disease. There are material differences between these two complaints, and one very seldom terminates in the other. Persons who void red sand, who are liable to these fits of gravel, as they are called, rarely are affected by the formation of a large calculus in the bladder. The period of life, the class of patients, and the symptoms of the disease are also different. Children from the age of three to six years are most liable to stone, and the composition of their calculi, removed by an operation, is for the most part the triple phosphate of ammonia and magnesia, sometimes mixed with phosphate of lime. Children are not subject to nephritic paroxysms, their urine seldom deposits red sand, nor do they void small calculi of uric acid. Gouty and dyspeptic patients, from 40 to 60 years of age, are most liable to that variety of the disease here described. Many have experienced these attacks during a long life, without any other inconvenience than pain for a

few hours, and irritation for a few days. The connexion of gout with calculus is well known; and the latter certainly depends in a great degree on a weakened and disordered stomach, just as described in those wine-drinking gentlemen, who got rid of their heart-burn and pain, and every other complaint arising from acidity, by taking magnesia. It would be useful to administer other absorbent earths under similar circumstances, and compare the effects.

Dr Egan, in his experimental inquiry into the nature of gravel and calculous complaints, infers, from a variety of experiments made on urine, that acids and accescent ingesta of every kind are prejudicial, and may be considered as remote causes of these complaints, by occasioning a precipitation of uric acid. The patients whom he examined were aged and gouty, the proper objects for Simpson's Hospital at Dublin, instituted for the reception of the blind and the gouty. Most of these patients are troubled with gravel, but none with stone: since Dr Egan admits that not a single operation of lithotomy has been performed in the course of ten years, nor has the sound, in the hands of an expert surgeon, discovered any traces of stone in the bladder. The following remark of Dr Egan bears strongly upon the present question. "As the severity of gout (says he) is uniformly diminished, nay, in many instances, the disease entirely removed by a residence of a few years in the house; we must expect to find the same take place with respect to gravel, to which it is so strongly and nearly connected. And this singular alleviation of both diseases, we can only attribute to the influence of temperance, and a manner of living very opposite to that of their former habits." (Trans. Royal Irish Academy, Vol. X. page 304.)

By regular mode of living, by abstaining from acids, and by taking alkaline medicines (the soap pills recommended by Dr Beddoes), these patients find great relief, and as dyspepsia constituted the chief part of their complaint, it was reasonable to expect they should. In such cases, which are indebted more to regimen than to physic, the medicine last taken gets the credit of the cure. We must be cautious lest the symptoms of indigestion be confounded with the effects of a morbid deposition of solid matter in the bladder, which must unfortunately exist unseen, some time before preventive measures are called for.

Dr Wollaston's valuable paper describes the leading properties of a new species of urinary calculus, which prove it to be a substance very distinct from all others, and as certainly extremely rare. Only two specimens of it have yet been discovered: one is in the possession of Dr Reeve of Norwich, and the other is

marked No. 46. in the collection of calculi belonging to Guy's Hospital. In appearance *the cystic oxide* resembles the triple phosphate of magnesia more nearly than any other calculus, but its surface is more compact; it does not consist of distinct laminæ, but appears as one mass confusedly crystallized throughout its substance. It is not soluble (excepting in very small proportion) in water, in alcohol, acetic acid, tartaric acid, citric acid, or saturated carbonate of ammonia. It is dissolved in considerable quantity by muriatic acid, by nitric acid, by sulphuric acid, by phosphoric acid, and by oxalic acid, and is precipitated from them by carbonate of ammonia. By distillation it yields carbonate of ammonia, and a heavy fetid oil; under the blow-pipe it may be distinguished from uric acid by the smell, which at no time resembles that of prussic acid, but has a peculiar fetor belonging to it.

The patient from whose bladder this calculus was extracted was five years old: it was covered with a coating of phosphate of lime, very loose in its texture, probably deposited whilst the patient was taking large quantities of soap and alkaline medicines; it weighed half an ounce when first extracted. Another stone formed in the bladder of this patient one year after the operation: he died without submitting to a second operation, and the stone found in the bladder after death differed from the former in its texture and chemical composition. It consisted principally of uric acid, but was peculiar in one respect, as its centre was hollow by the removal of some more soluble substance, of which the nucleus had consisted.

Dr Wollaston takes this opportunity of correcting some little inaccuracy in his former analysis; and, in particular, he proves that a calculus taken from the bladder of a dog, which was said to consist of super-phosphate of lime and phosphate of ammonia, in the Philosophical Transactions for 1798, does in fact consist almost wholly of magnesia; and there is reason to doubt whether a compound that is so very soluble in water as super-phosphate of lime, ever forms a part of urinary concretions. He concludes his communication with some curious observations on the connexion of uric acid in the urine of birds and their food, and ends with the following reflection. "It seems deserving of inquiry, what changes might be produced in the urine of any one animal by such alterations of diet as its constitution would permit; for, as far as any inference can be drawn from these varieties which naturally occur, it would appear that persons subject to calculi, consisting of uric acid, as well as gouty persons, in whom there is always a redundance of the same matter, have much reason to prefer vegetable diet; but that the preference

usually given to fish above other kinds of animal food, is probably erroneous." p. 230.

In the application of chemical analysis to medical practice, we must be cautious in generalizing too hastily. The functions of digestion and secretion are so imperfectly understood, that there is a constant source of error to be guarded against; for by omitting one link in the chain of causes, or substituting another in the wrong place, our conclusions may be wide of the truth. The changes in the urine are better understood now, than at any former period; and it is reasonable to hope, that an increase of knowledge will increase the power of alleviating the diseases connected with so important a part of the animal economy.

V.

Observations on Luminous Animals. By J. Macartney, Esq. Communicated by Everard Home Esq. F. R. S. (*Phil. Trans. for* 1810, *Part II.*)

This paper bears decisive marks of coming from a very intelligent and excellent physiologist, and is peculiarly distinguished in the volume where it stands, by the novelty and accuracy of the discoveries which it proclaims. The author first examines the grounds on which the property of showing light has been ascribed to certain animals, that either do not possess it, or in which its existence is questionable: he next gives an account of some luminous species, some of which were before imperfectly, and others wholly unknown: he then explains many of the circumstances attending the luminous appearance of the sea, and describes the organs employed for the production of light in certain species: and lastly, reviews the opinions which have been entertained respecting the nature and origin of animal light; in the course of which discussion, he relates some well-devised experiments made for the purpose of elucidating this part of the subject. We need only direct the attention of the naturalist and the medical philosopher to the whole communication, whilst we chronicle in our pages the several conclusions that are the result of Mr Macartney's observations on the phenomena of animal light.

"The property of emitting light is confined to animals of the sim-

plest organization, the greater number of which are inhabitants of the sea.—The luminous property is not constant, but in general, exists only at certain periods, and in particular states of the animal's body. The power of showing light, resides in a peculiar substance or fluid, which is sometimes situated in a particular organ, and at others diffused throughout the animal's body.—The light is differently regulated, when the luminous matter exists in the living body, and when it is abstracted from it. In the first case it is intermitting, or alternated with periods of darkness; is commonly produced or increased by a muscular effort; and is sometimes absolutely dependent upon the will of the animal. In the second case, the luminous appearance is usually permanent until it becomes extinct, after which it may be restored directly by friction, concussion, and the application of warmth; which last causes operate on the luminous matter (while in the living body) only indirectly, by exciting the animal.—The luminous matter, in all situations, so far from possessing phosphoric properties, is incombustible, and loses the quality of emitting light, by being dried, or much heated.—The exhibition of light, however long it may be continued, causes no diminution of the bulk of the luminous matter. It does not require the presence of pure air, and is not extinguished by other gases.

"The luminous appearance of living animals is not exhausted by long continuance, or frequent repetitions, nor accumulated by exposure to natural light: it is therefore not dependent upon any foreign source, but inheres as a property in a peculiarly organized animal substance or fluid, and is regulated by the same laws which govern all the other functions of living beings.

"The light of the sea is always produced by living animals, and most frequently by the presence of the medusa scintillans. When great numbers of this species approach the surface, they sometimes coalesce together, and cause that snowy or milky appearance of the sea, which is so alarming to navigators. These animals, when congregated on the surface of the water, can produce a flash of light, somewhat like an electric corruscation. When the luminous medusæ are very numerous, as frequently happens in confined bays, they form a considerable portion of the mass of the sea, at which times they render the water heavier, and more nauseous to the taste; it is therefore adviseable to always strain sea water before it is drunk.

"The luminous property does not appear to have any connexion with the economy of the animals that possess it, except in the flying insects, which by that means discover each other at night, for the purpose of sexual congress."

VI.

Description of an Affection of the Tibia induced by Fever, with Observations on the Treatment of this Complaint. By Thomas

WHATELY, Member of the Royal College of Surgeons, London. London, 1810. 8vo. pp. 59.

THE complaint of which this essay proposes to treat, is a disease of the tibia, in which a small opening is generally discovered in the integuments covering its internal side, through which a probe may be passed into the cavity of the bone, where one or more loose pieces of bone are usually found; which being confined, from their being often of larger dimensions than the opening in the tibia, prevent the healing of the ulcer.

The appearances of this disease seem thus to have a striking resemblance to those of necrosis, so that the one might easily enough be mistaken for the other. In necrosis, while a portion of a long bone dies, a new formation is going on, which envelops the old bone, and, when perfected, supplies its place. The old bone enclosed within the new, is gradually decomposed and separated; and the cure of the corresponding disease may often be advanced by a well-timed extraction of the sequestra. But in the disease to which our attention is now called, according to Mr Whately's description, the sequestra, or loose pieces of bone, are merely exfoliations of the internal laminæ of the tibia. The whole shell of the bone is not lost, and there is consequently no reproduction of new bone, as in necrosis.

The disease now under consideration, seems in most cases to have occurred as a sequela of fever. Mr Whately concludes that it is not a very frequent disease, because, in the course of his practice, he has not had more than thirty cases of it entrusted to his care. We will readily admit, from this document, that it is not so common a disease as piles, or fistula, or stricture in the urethra. But if Mr Whately has committed no mistake, we would conclude that it is a pretty frequent disease.—Were none of these cases of necrosis? We suspect that at one time Mr Whately was not perfectly acquainted with that interesting disease. *

With regard to the treatment of the disease now under consideration, as the cure of the ulcer is prevented by the loose pieces of bone pent up within the cavity of the tibia, it is sufficiently obvious that these must be removed, if nature prove unequal to the task. And with this view any other surgeon but Mr Whately, would, if necessary, use his scalpel, his saw, trepan, scissars, or chisel, to make way for his probe or forceps, to extract the exfoliated pieces.

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* See Practical Observations on the Cure of Wounds and Ulcers on the Legs, by T. Whately.—London, 1799.

But Mr Whately endeavours to avoid all unnecessary pain and operations. How?—If the opening be too small, he first applies *kali purum* in such quantity as shall destroy the integuments around the ulcerated opening. In *a week or ten days afterwards*, the slough comes away; and if the caustic have performed its office, the surface of the tibia will be perfectly bare; but if not, the kali must be applied a second time, or a third time perhaps; but a third application, he assures us, will seldom be necessary. The tibia being at last exposed, if the opening which leads to its cavity be found too small to admit of the extraction of the sequestra, he in the next place applies his caustic to the bare surface of all the tibia itself, around the hole; and thus, in *a month more*, effects an exfoliation of all that part of the bone to which the kali purum had been applied. Mr Whately is not yet in any hurry, but allows the exfoliated piece to remain unmolested for two or three days, when he begins to coax it with his probe. At length he removes his exfoliation; and having gained an opening into the cavity of the tibia, he condescends like other people to touch the cold steel, and with probe and forceps to remove the imprisoned pieces,—if he can find them. For sometimes they are very minute, and not to be found till after two days probing and searching. In one case, indeed, Mr Whately probed and searched in vain.—From which he concludes, not that the object of his search had no existence—but that from its minuteness it had eluded the probe, or escaped unperceived in the dressings.—

"*Idola specus* sunt *idola* hotainis individui."

Caustic, and especially kali purum, is one of Mr Whately's idols.

VII.

Practical Essay on Cancer, being the Substance of Observations, to which the Annual Prize for 1808 *was adjudged, by the Royal College of Surgeons of London.* By Christopher Turner Johnson, Surgeon, Exeter; Member of the Royal College of

Surgeons, London, and of the Royal Medical Society of Edinburgh. London, 1810. 8vo. pp. 126.

THERE is nothing in this Essay which need detain us long.—The College of Surgeons has conferred its prize on a tame, though faithful enough summary of the least disputed circumstances which make up the history of cancer. The subject was an unpromising one; and the College has obtained from the successful candidate all that could well be expected,—a well written outline of all that is certainly known of the appearances and progress of the disease, in different structures.

VIII.

An Account of Spina Bifida; with Remarks on a Method of Treatment proposed by Mr ABERNETHY. By THOMAS VERNEY OKES, Member of the Royal College of Surgeons, and one of the Surgeons of Addenbrooke's Hospital, in Cambridge. 8vo. pp. 34. 4 Plates. Caddell and Davies, London.

So long as the liberty of the press shall continue, we must expect that in medicine, as in other matters, the opinions of individuals will be canvassed and criticized in a manner proportioned to the ability and reputation of the proposer. It is perhaps to some such circumstance as this, that the appearance of the pamphlet under examination is to be ascribed. It contains but little new matter, and that little is not very interesting, except in so far as it calls the attention of the reader to the mode of treating cases of cleft spine, lately proposed by Mr Abernethy, in his treatise on Lumbar Abscess—a mode of treatment so very different from that which has been hitherto pursued, that it has excited the attention of our author to the subject. Mr Okes has ransacked the records of medicine, and produced from our most valuable collections of cases, some that are highly characteristic of the disease in question, with the treatment that was pursued. From an attentive examination of these, and comparison of their results, together with the issue of *sixteen cases* which have fallen under his care, our author has ventured to question the propriety of Mr Abernethy's method of treatment, and has drawn conclusions on

the subject, very different from those which the former has offered.

In the introduction, Mr Okes communicates the following plan, which he has proposed to himself to follow, in discussing the subject.

"1*st*, To give a description of the disease.

"2*dly*, To select a few cases from some of the most eminent writers. And,

"3*dly*, To offer some observations on the treatment of the disease, deduced from the analogy which these cases bear to diseases intimately connected with the coverings of the brain."

From such an *exposé* we are not to expect any particular improvement which he may "have it in his power to lay before the public;" and agree most cordially in opinion with him, that it is no less "his duty to point out the mischiefs of erroneous practice,"—mischiefs which in our opinion become more dangerous in proportion to the ability and reputation of the person by whom they have been proposed. Impressed with such sentiments, we are disposed to think favourably of Mr Okes's pamphlet, as, by calling the attention of practitioners to such cases, they may assist them in deciding on a practical point, in which they may have been swayed by the more recent publication of Mr Abernethy, and which, from his deservedly high reputation, may have had greater weight when not counterbalanced by these older cases.

The description of spina bifida given at the commencement, differs in nothing from what is to be found in other writers, and occupies about two pages of an octavo pamphlet; this is succeeded by details of three cases from Tulpius, two from Ruysch, and one from Morgagni. Of these we think it unnecessary to give any account, as we presume they are not unknown to such of our readers as have studied this subject with attention; and shall only remark, that the unsuccessful issue of all these cases, has induced their narrators individually to condemn every attempt to remove the tumor, either by incision, puncture, or ligature, all of which have been recommended as means adapted for the purpose. Our author then proceeds to examine the arguments of Mr Abernethy, as detailed in his essay on Lumbar Abscess; and as coming "from the pen of so excellent a surgeon," he quotes the whole of the two cases mentioned by him. The unfortunate result of the cases treated in this improved manner, as well as of the foregoing, draws from our author the expression, "that no instance whatever of recovery from this disease, after such an operation, can be adduced. The treatment of some of them may be alleged as the cause of fatality; yet still we may be taught by some, what treatment is

absolutely improper; and from others, we may deduce, that no *operation* at all ought to be hazarded."

The danger in evacuating the contents of this hydropic tumor, like those of hydrocephalus internus, arises, in our estimation, from the sudden removal of a certain degree of compression to which the spinal marrow has for a length of time been subjected, and which has in some measure become necessary to its existence: accordingly, when this pressure has been removed, just as in the evacuation of the water in ascites, debility and syncope are the consequences: in the latter, the danger is removed by substituting compression by a proper bandage, but in the former we have not an opportunity of doing this, owing to the bony envelop of the skull and spine; and we much doubt, even if we had it in our power to do it, whether or not we should be able to succeed, having no means of judging of the requisite degree of force with which the bandage ought to be applied to procure the proper effect, without at the same time deranging the functions of the nervous system. It is to this circumstance, more than the introduction of the external air, in the ordinary way of operating, that we are disposed to ascribe the danger.

After a few observations on the cases and proposal of Mr Abernethy, which have served as a text for the commentary of our author, he proceeds, at page 32, to draw the following general conclusions:

"That if an hydrorachitic tumor ulcerate and slough, so that an opening be made, the patient will inevitably die—that if the contents be evacuated by a trocar or lancet, and the opening be left uncloſed, the patient will die—that if a ligature be applied round the baſe of the tumor, the patient will die—that if the contents be evacuated by a trocar, and the opening cloſed and healed by the firſt intention, *the sac will not contract so as to prevent a fresh accumulation of lymph*, but it will be ſpeedily and repeatedly reproduced, and no advantage will be gained by the operation."

Our author regrets that he has no more successful mode of cure to recommend, and that he must content himself with showing, not what *ought* to be done, but what *ought not* to be done; and concludes his essay of thirty-four pages with the following complimentary passage to the gentleman whose proposal called forth his publication.

"Upon the preſent occaſion, the name and influence of a very diſtinguiſhed member of our profeſſion, might lead to conſequences as injurious to ſociety, as diſtant from his own intention and benevolent diſpoſition. It is upon this ground that that liberal and enlightened gentleman will not, I am well aſſured, be diſpoſed to attribute to me, as writer of theſe remarks, any other motives than thoſe which I have now avowed. His name, were I diſpoſed unbecomingly to affail it, is far beyond the reach of an unpretending pamphlet like mine: his merits are not to be impeached by any ac-

sidental view of a subject, to which he may have been directed: but our art, and the sources which lead to it" (its perfection), "are open to us all. It is from the various lights in which experiments are contemplated, and from the conflicting opinions which result therefrom, that truth itself is finally and firmly established; and under this impression, I therefore commit, with some little confidence, these observations to the public. Whatever may be their deficiency in style and arrangement, the *intention* will, I am convinced, bear me out in the estimation of every good man, to whom even an hour's prolongation of existence of a fellow-creature can never be an object of indifference."

We have made this long quotation, to point out to our readers the temper and moderation which our author has observed in discussing an important point in the practice of medicine. Had the same been observed on many other occasions, much bitter invective and fruitless discussion, which had not the benefit of society in view, would have been avoided, but which appears to have been instituted to gratify revenge, and to give vent to feelings of recrimination. With such an idea of the merits of this publication, as well as considering it entitled to the perusal of our brethren, we would recommend it to their attention. On the four plates which are added, we have nothing to offer. The two first are copies from Tulpius and Ruysch; the two last are from the author's own preparations; but they are too minute to give a faithful and accurate representation of their subject.

IX.

Remarks on the Nomenclature of the New London Pharmacopœia. Read before the Liverpool Medical Society. By JOHN BOSTOCK, M. D. late President of the Edinburgh Medical Society, &c. &c.

WE have oftener than once had occasion to state our opinions on pharmaceutical nomenclatures, and we advocated what we considered as the reform of the Edinburgh college, against the criticisms of the very respectable author of the pamphlet now before us. From the perusal of his present remarks on the nomenclature of the London college, we perceive that he still retains his opinion; and, notwithstanding all his animadversions, we still retain ours. Dr Bostock's objections are either general or special.

The former we already noticed at some length; and the justice of the latter in many instances we readily admit, both as applied to the London and the Edinburgh college. The only general objections to which we shall at present allude, are the conclusion which he draws from the differences between the nomenclature of the London, and of the two editions of the Edinburgh Pharmacopœia, that the construction of a pharmaceutic nomenclature, on scientific principles, is not likely to render it either uniform or permanent.

That there are many differences is certain; but they do not appear to us to warrant the inference in its full extent. Many of them originate in error in one or both of the Royal colleges, and will be removed as their members become better informed, or the progress of science advances. Others arise from some difference in the principles assumed as the basis of the nomenclature, by the two colleges. This is unfortunate, as it constitutes a permanent bar to uniformity, and furnishes the opposers of reforms with a numerous, if not a very powerful string of arguments. We trust, however, that it will be ultimately removed by a mutual understanding among the colleges of the three divisions of the empire. One of these principles must be preferable to the others, or they are all equally applicable. In the former case, the means of attaining uniformity is obvious. In the latter, that college is entirely to blame for all the evils which may arise from want of uniformity, which deviated without sufficient reason from the authority of its predecessor. A principle which has been sanctioned by the adoption of any one of the colleges, should always be adopted by the others, unless another, obviously and greatly preferable, should be substituted in its place; and we cannot suppose it possible that any of these grave and learned Bodies should be so influenced by a mean and contemptible jealousy, as to reject an obvious improvement, merely because it was introduced by another, or to differ for the sake of differing. In doing what is right, there is no disgrace in being second; all cannot be first. We may here remark, that we have heard many instances of want of uniformity quoted, which we do not admit. We consider *sulphas potassæ*, for example, and *potassæ sulphas* as one and the same name; although, in forming an alphabetical list, we prefer the London form of placing the name of the basis first, because it groups the articles more naturally, showing at one glance the whole officinal forms of the metals for example, whether metal, oxide, or salt, and because the place which it gives in the arrangement is not liable to be affected by differences in opinion by future discoveries with regard to the nature of some articles, such as the relative proportion of alkali and acid in the

alkaline carbonates. But although absolute uniformity will probably never be attained, yet still we contend that the adoption of the scientific nomenclature is calculated to bring us nearer it. We must not confine our attention exclusively to the discrepancies between the Pharmacopœias in which it has been introduced; we must contrast them in this respect with those in which it was not attempted. Accordingly, in these we find the dissimilarity infinitely greater. Guided by no great or manifest principle, every College had a language of its own; and there was no tendency to approximation, because they had no common principle to direct them. Now the case is different; their object is the same, however they may differ in the means of accomplishing it.

Permanency is also denied to be a probable result of the new nomenclature, but we still think on insufficient grounds. We admit that the changes adopted in the second edition of the Edinburgh, and in the London Pharmacopœias, give some degree of plausibility to the assertion. But these changes, if not arbitrary, are all advances towards permanency. They were the consequence either of neglect or inaccuracy in the application of principle, of some improvement in principle, or of some advancement in science. The old nomenclatures were equally fluctuating. No Pharmacopœia was ever republished without many changes. Reform was always attempted; but not being conducted upon any general principles, it was vague and unsteady. Compare the fluctuating and multiplied names of the acids, alkalies and salts, in the old Pharmacopœias, with their steadiness and uniformity now, and we must hope that these desirable objects of uniformity and permanency will be at last attained.

It would be almost endless to enter into the special exceptions taken to the new nomenclature. Many of them are avowedly of no moment, and made to show how far it is exposed to criticism. Others are important. Of these some prove, that, according to the principles assumed by the Colleges, other names should have been given; or, in other words, that their nomenclature is not consistent. In these cases, however, the objection removes itself; for the Colleges have only to take advantage of the critic's knowledge, and feel grateful to him for correcting their errors. In this point of view, the scientific nomenclature, and the controversies to which it has given rise, have already reacted upon the science itself, and led to the investigation of many points, which, but for these, would not have attracted attention. There are, however, some grounds upon which the reformers are charged with inconsistency, which admits of a very obvious and easy refutation, viz. that they have not carried their reform to the utmost extent, and have left some of the old names unaltered, instead of

substituting scientific names. But on these accounts, the reformists, in our opinion, rather deserve credit for their moderation, as one of the great objections generally made to reform is, that when it is once commenced, it imperceptibly and naturally degenerates into excess. Besides, many of these inconsistencies are only apparent; and the modifications and exceptions may be as much guided by principle as the reform itself. For example, although in general the scientific names are to be preferred, yet it may be expedient to retain proper names, where they are established, convey no false notion of the substance, and can lead to no mistake, and where the accurate scientific name is still unascertained, or verbose, or where there may be more than one scientific name for substances promiscuously employed under one proper name, as in the case of gums and resins obtained from different vegetables. Again, the abbreviations of verbose scientific names may be conducted on fixed principles, when many of these apparent inconsistencies will disappear. For this purpose, the adjunct *compositus* is convenient, provided it be used consistently, and according to some general rules. We would never employ it when there are only two ingredients, or two active ingredients of nearly equal power, because it will be equally convenient to express both in the name. It is chiefly in regard to vegetable substances, that abbreviation becomes necessary. All plants are designated by at least a generic and specific name, and in many instances the particular variety must even be denoted. To insert all these three words along with the name of the part, though correct, would be extremely inconvenient. It therefore becomes a matter of consideration, which of them may be omitted. The Colleges have sometimes preferred the generic, and sometimes the trivial name, and have sometimes retained both, and thus exposed themselves to the charge of inconsistency. The last method should always be used, when there would otherwise be any doubt or ambiguity; and where one may be dispensed with, we consider it preferable to retain that which is a characteristic or proper name, whether it be generic or specific, rather than to prefer the one of these always to the other. The Colleges have certainly fallen into errors and inconsistencies in naming the officinal parts and products of vegetables, by either not being sufficiently precise, as using *cortex* for the rind of the fruit, or from attempting to give too specific a denomination to substances whose nature is still uncertain. Thus the more specific terms of *gummi*, *resina*, *gummi-resina*, &c. may be employed when the term is perfectly conformable to their nature; but where this is at all doubtful, or more compound, we would prefer the more general term of *succus spissatus*.

To those who are at all interested in the controversy, we must recommend the unprejudiced study of both Dr Bostock's pam-

phlets; and we are convinced that the reformists themselves will not fail to be much benefited by them, whenever they shall think proper to revise their labours. We shall now finish by extracting the concluding paragraph of the essay before us.

"The general conclusion that I feel myself warranted in drawing from the above observations, is, that the attempt of the London College to reform the language of their pharmacopœia, and to assimilate it to that of natural history and chemistry, is no less imperfect, than that of the Edinburgh College. It also appears to me evident, that the alleged advantages of this reform are not in any degree likely to accrue from it, and that the practice of pharmacy will be involved in much difficulty, from the confusion necessarily attendant upon so extensive a change. If we draw a comparison between the pharmacopœiæ of London and Edinburgh, we shall probably be led to conclude, that the London is better adapted for the purposes of prescription, but that the Edinburgh is more scientific. The Edinburgh physicians, having once determined what course to take, proceeded in it with much more consistency and firmness; whereas, the London physicians, while they were forming their system of nomenclature, seem to have been fully aware upon what dangerous ground they were treading, and were perpetually swerving from their general plan, for the purpose of avoiding individual difficulties. It is not improbable, that the London College might feel desirous of obviating some of those objections which had been raised against the Edinburgh nomenclature, founded upon the inconvenient and awkward length of many of the names, and might, on this account, determine to employ a language less remote from that in common use, forgetting, unfortunately, that by such a procedure they were counteracting the very object of the reform itself. I conceive the result will be, that in Scotland, in consequence of the concentration of medical knowledge that takes place in the Universities of Edinburgh and Glasgow, and the influence which they possess through the whole of that country, the new nomenclature will be frequently employed, at least among the younger practitioners. Whereas, in England, where the London College has so little authority over either the actions or the opinions of the great body of the profession, their publication will be little attended to, and will produce little change in the language of the great bulk of medical prescriptions."

X.

Observations on the Act for regulating Mad-houses, and a correction of the Statements of the Case of Benjamin Elliot, convicted of illegally confining Mary Daintree; with Remarks addressed to the Friends of Insane Persons. By James Parkinson. London, 1811. pp. 48.

The case which has given occasion to this tract appears to be one of peculiar hardship.

"Nearly four years ago, Mrs Mary Daintree, who had lost her husband some months before, became so much deranged in her mind as to be troublesome, by the strangeness of her conduct, to the neighbourhood in Rosoman Street, Clerkenwell, in which she resided. She was sometimes seen walking up and down the street where she lived, at four or five o'clock in the morning, in the most agitated manner. Sometimes she fancied that voices came down the chimney, or through the wainscot, or were to be heard in the air, calling her reproachful names, and accusing her of killing her husband. At other times, she would be seen walking about with a long cord wrapped many times round her body, or her arm, saying that she had been ordered to wear it, and would not admit of its removal. One evening, in particular, her distress seemed to be so great, and she having tried to conceal a cord, and then a knife, as it was supposed for the purposes of self-destruction, that it was found necessary to sit up with her all the night. Seeing her in this state, an intimate friend made application to her brother, and it was concluded that she should be gotten into St Luke's Hospital: but on getting the blank tickets, and finding that, as the relations thought, her having an income of eighty pounds per annum would render her unfit to be offered as an object of charity, the tickets were not employed.

"At this period, she repeatedly applied to Mr and Mrs Elliot, her nephew and niece, and requested that they would let her have an apartment in their house for herself and son; complaining that the wretches would never let her alone in Rosoman Street; that they were always calling her names, and charging her with being the death of her husband; that the hawkers of coals went about there with a bell, giving out that she was a bad woman; and that the children were set on by the wretches to abuse her.

"Mr and Mrs Elliot unfortunately complied with her request; but she soon became so exceedingly noisy and mischievous, still fancying that her tormentors followed her with their voices, and abused her, that application was again made to her brother, who then desired that they would get her into a private mad-house; which, as she became exceedingly violent and dangerous, was done on the 28th of November 1810.

"On the following morning, I first saw her, at the desire of Mrs Burrowes, but finding her answers to be rational, although her manner was strange and eccentric, I declined signing the certificate until I had gained more information respecting the nature of her insanity. Having inquired, therefore, from where she was brought, I went to St John's Street, and wishing to obtain my information from those who were least likely to be interested, I first of all made inquiries at the houses on each side. At one of these houses I was informed that they knew little of her; but that their lodgers were often disturbed by the noises which she made. At the other house, I believe neither the master nor mistress was at home; but as to this I am not sure, my memory not serving me correctly, it being full three years since.

"I then went to the house, and saw Mr and Mrs Elliot; but told

them, on their proceeding to give me their reaſons for ſuppoſing her inſane, that I muſt have other evidence, if poſſible, than theirs. I therefore begged to know who elſe lived in the houſe, and was informed, a lodger and Mrs Daintree's ſon, both of whom I had called to me.

"Upon inquiring of the lodger, ſhe declared that ſhe was convinced of her inſanity; that ſhe had heard her complain of hearing voices; that, as ſhe lived in the room over her, ſhe could frequently hear her, when ſhe knew her to be alone, talking loudly, as if in converſation with perſons in her apartment; and that ſhe had ſeen many inſtances of her violent and dangerous conduct. I then ſaw her ſon, a youth about ſixteen years of age, and inquired of him what he thought of his mother's ſituation, to which he anſwered, that ſhe was certainly mad; and upon ſome one obſerving, that, before this, ſhe had been rather in a low deſponding way, I aſked the ſon if he could form an opinion as to the cauſe; but the anſwer which I received, I refrain from giving here, from motives of delicacy.

"Thus furniſhed with the neceſſary points on which to examine my patient, I returned to her; and after ſome further converſation, was fully convinced of her being a lunatic, and ſigned the certificate.

"Her confinement laſted about three months, during which ſhe was viſited by her ſon every week or fortnight, at the importunity of Mr and Mrs Elliot, with whom he continued to live. At this period ſhe ſaw an acquaintance from one of the windows, whom ſhe called to, and informed, that ſhe was confined there though perfectly in her ſenſes, and deſired ſhe would come and ſee her. Her acquaintance, therefore, applied to Mrs Burrowes, who immediately introduced her to Mrs Daintree; and upon her brother's coming to town ſhe was releaſed, in conſequence of the repeated applications of theſe acquaintances.

"On October the 29th, 1810, three years within a month after the time of ſigning the certificate, I received a ſubpœna, and attended as a witneſs on the trial of Benjamin Elliot, his wife, and Sarah Bodkin, Mrs Daintree's ſiſter, for a conſpiracy, the object of which was illegally to deprive Mary Daintree of her liberty."

It is to be regretted, that the evidence in ſupport of the indictment is not given. On the part of the defender, Mr Parkinson and Mrs Daintree's ſon were called.

Mr Parkinson deponed, that in conſequence of what he learned from the examination of her neighbours, and of Mrs Daintree's own ſon, and his ſubſequent examination of the patient herſelf, he was convinced of her inſanity, and ſigned the certificate under which ſhe was confined.

"Mrs Daintree's ſon being examined, he ſwore that "he had never ſeen her any more mad than ſhe was then." On this, I ſtated in a note to Mr Gleed, the counſel for the defendant, that I had examined the ſon of Mrs Daintree before I ſigned the certificate, and that he had declared his mother to be inſane, and had even given a cauſe for it. Mr Gleed them aſked him if he remembered Mr Parkinſon's examining him reſpecting the ſtate of his mother's mind? He anſwered, No. Then, ſaid Mr Gleed, I need ſcarcely aſk you if you acknowledged your mother to be out of her mind? To this he replied, Never. I was then

again examined by Mr Gleed.—Who did you ſee at St John's Street? A. A youth, who I underſtood to be the ſon of Mrs Daintree; but the Court will be pleaſed to obſerve, that, at three years diſtance, I do not ſwear that the youth I then ſaw is the ſame who has juſt given his evidence. (Recollection, however, ſoon convinced me that it was the ſame young man.) Mr Gleed was proceeding with his examination, but was oppoſed by Mr Alley, on the ground, that he was endeavouring to impeach the veracity of his own witneſs (Mrs Daintree's ſon.)

"This unexpected depoſition from one of the witneſſes which had been called by the defendant, appeared to be the circumſtance which chiefly influenced the Jury in the verdict which they gave againſt him, and which was followed by a ſentence of ſix months' impriſonment in the houſe of correction in Coldbath-fields."

It is evident, that the juſtice or injuſtice of this ſentence depends entirely upon whether Mr Parkinson or Mr Daintree was guilty of perjury; and we can ſee no reaſon for attaching the ſlightest ſuſpicion to the former. At the ſame time we may remark, that the evidence obtained from him, in conſequence either of his want of memory, incapacity on the part of the counſel who examined him, or the forms of the Engliſh court, was not perfectly ſatisfactory. Although it may be in general expedient that no hearſay evidence ſhould be received in criminal trials, yet as medical men very frequently act upon information which they receive from others, and indeed often can have no other grounds for their opinion than the circumſtances related to them by others whoſe teſtimony they credit, and as their judicial evidence is oftener required in regard to their opinion, the reſult of their profeſſional knowledge, than as mere caſual witneſſes of facts, we think it hard if the forms of the Engliſh courts ſhould prevent them from ſtating, in their juſtification, the grounds upon which they were led to form their opinion. Nor can we ſee the propriety of checking Mr Gleed when proceeding to impeach the veracity of his own witneſs; for we ſhould conſider the evidence which is extorted from an unwilling witneſs, by the examination of an acute counſel, to be the ſtrongeſt poſſible. Mrs Daintree's ſon, although cited by Mr Gleed, might wiſh to conceal the evidence deſired from him; and it was Mr Gleed's buſineſs ſo to examine him as to convince the jury, that in one part of his evidence he ſpoke the truth, and that in another he perjured himſelf.

Be theſe things as they may, the occurrence of this caſe, and the newſpaper miſrepreſentations of it, have induced Mr Parkinſon to write a pamphlet, containing matter worthy of grave conſideration.

In reflecting on the proviſions contained in the act for regulating mad-houſes, we have always been ſenſible of the difficulty of the ſubject; but at the ſame time we could not help being ſtruck with many imperfections which we thought might be removed.

Upon a former occasion, we adverted to some of these; and at present shall confine ourselves to a few of the remarks made by Mr Parkinson, who seems to have considered the subject very attentively.

"One of the most important regulations in this act, is that which is intended to prevent keepers of mad-houses from receiving patients without having an order, in writing, under the hand and seal of some physician, surgeon, or apothecary. But it appears doubtful, whether this clause, as at present worded, yields that security which was expected from it, owing to its admitting the validity of an order, signed by any person, whose claim to be considered a member of the medical profession rests only on his designating himself an apothecary. Such persons are not legally recognised as fit judges of the maladies to which the human system is subject. Their abilities have been examined by no prescribed test, nor have they received any authority to take on themselves the delicate and important task of judging of, or of practising upon, the diseases either of the body or of the mind.

"That in this metropolis, and in many parts of the empire, there are many very respectable persons, who, with the designation only of apothecaries, possess every acquirement which is requisite for the successful exercise of their profession, is well known. But it is equally well known, that there is hardly a neighbourhood which is not infested with some ignorant and illiterate being, who having learned the names of many medicines, and of some diseases, seeks a livelihood by putting the lives of his neighbours at hazard, by pretending to remove the diseases with which they may happen to be afflicted.

"Should the range of such men be enlarged?—Should they, in addition to the calamities with which they are now able to inflict the families around them, be empowered, at their will, and on their judgment, to decree the confinement in a mad-house, of any one, whom, from their ignorance, their pliant servility to a superior, or their easy yieldings to interested and well-managed importunities, they may be induced to term insane? A decided negative to these questions must surely be given, after considering the possible, nay, the probable consequences of such a permission.

"In places somewhat distant from the metropolis, characters of such a description are most likely to be found; and there are they enabled to occasion the greatest injury. For, supposing that any person of this description should *improperly*, but according to the best of his judgment, and under circumstances artfully contrived to secure his compliance, grant a certificate of lunacy, the subject of that certificate may directly be consigned to a mad-house; and if the house to which he is thus consigned should not be within seven miles of the metropolis or within the county of Middlesex, the keeper of such house is not required to give notice of the receipt of such person, but within fourteen days. For a period of this length, therefore, a person manifesting only an eccentricity of manner, perhaps even the consequence of a superior degree of intellect, may, from caprice, interested motives, or ill-judged temerity, be condemned to the horrors of a

mad-house, without an opportunity, being cut off from all communication with society, of claiming his release; and without a chance of any of his relations or friends obtaining information of the place of his concealment.

"But what takes place even at the expiration of the fortnight?—The keeper of the house sends notice of having received a patient of such a name into his house, and what then?—if no friend or relation should think of making inquiry respecting him, he may wait for his release until the visitation of the house by the commissioners appointed for this purpose. This may not happen quite so early as the unfortunate prisoner may wish, since the act only requires a visitation from the commissioners within seven miles of London and Westminster, and within the county of Middlesex, once at least in every year; and at a distance of more than seven miles, and out of the county of Middlesex, only as often as they shall think fit; no certainty of a visitation within any given period being here assured.

"But let the difficulty of determining in many of these cases be attended to, and then let the propriety of trusting to persons of this description for a decision, in such cases, be considered."

Upon this subject we perfectly agree with Mr Parkinson; and, willing, as we are, to permit every man to intrust his health to whom he pleases, we have always considered that the law has never made a sufficient distinction in regard to their testimony, professional charges, and in matters of certificate, between *regular* and *irregular* practitioners.

We have also selected the following paragraphs as worthy of consideration, by calling the attention of practitioners and legislators to difficulties connected with the present act, and pointing out what the author conceives to be the best means of removing them.

"Patients are frequently brought from a considerable distance in the country, to some mad-house in town, and without a regular order. The patient may be a decided lunatic, in a paroxysm of dreadful exertions; but as he is not accompanied by a regular order, the keeper of the house cannot receive him, until a medical person can be found to certify his lunacy. In this interval, he must remain exposed to an accumulating crowd, unless, which is not always the case, some other place can be found near the spot, in which he can be received for that space of time. Other patients, those who are disposed on any little temporary irritation to dangerous acts of violence, may be also brought, without a certificate, from a distance, immediately after a dangerous paroxysm, but now in an interval so lucid, as not to enable a stranger to determine, from an examination, at that time, whether he is a lunatic or not. If admitted, the penalty is incurred, and if not, serious and even fatal mischief may be the consequence. Might not, in the first of these cases, when the madness is *evident*, the patient be received, and twelve hours be allowed for shelter, before the order shall be required to be signed? Where the patient is said to be dangerous, but the disease is only *apparent*, might not his continuance under con-

finement be allowed for twenty-four hours, to allow of further examination, and an opinion of higher authority, before signing the order?

"But assuming that a patient is regularly received into a house of this description, what means of assurance does the act offer, that he shall obtain his liberty as soon as his recovery shall be completed, and that he shall not be detained from any improper motives of his relatives, or of his keeper? The only answer that can be here offered, is, that the act obliges the visitation of the commissioners, once at least in every year, and at times of which no notice is given to the keepers of these houses. But cases frequently occur, in which the necessity of confinement exists but for a few days.

"It appears, therefore, to be necessary, that some provision should be adopted to prevent the unnecessarily long detention of a patient in these houses; but it is equally necessary, that the keepers of these houses, the relations, and even the medical attendant, should be protected in those cases; in which, from the ambiguity of the case, the necessity of the continuance of confinement is not evident to those who are not in the situation of frequently seeing the patient.

"An obvious mode of proceeding here indeed presents itself;—a reference may be made to a physician, on whose opinion the decision may be made; but who is to nominate this physician? By whichever party he is nominated, the other may find objection to the appointment; and if another should be called in, and a difference of opinion should arise, what is then to be done? It may be said that a commission of lunacy may be obtained; but, independent of the expense of such a proceeding, the case is assumed to be of such a kind, as to render this mode improper, since the patient is supposed to be either convalescing or cured. In such cases, should not the opinion of one of the commissioners under this act be rendered attainable, on payment of a certain sum, &c. and without previous application to any of the courts of law? the opinion thus obtained being efficient for the protection of the relation, as to that particular act; or for the liberation of the patient, unless notice within a certain time is given, of claiming the opinion of the whole board, or of bringing the case before a jury.

"Should circumstances arise, which shall procure a revision of this act, it is to be hoped that a clause will be introduced to prevent or punish any cruelty or *misdemeanor* towards any insane patient."

We cannot omit this opportunity of again stating, that Scotland has hitherto been left without any regulations in regard to lunatics. There is no legal provision for criminal or pauper lunatics. Some of the latter are daily to be seen infesting the streets even of the capital; and our common jails enclose for life several of the former description. As to private mad-houses, it is sufficient to observe, that every person, however ignorant, or unprincipled, may keep a prison under that title; and that, unless where some person having a legal right, procures a warrant to search for an individual suspected to be confined in one of them, they are under no controul whatever, and the conduct of their keepers is never inquired into.

PART III.

MEDICAL INTELLIGENCE.

Report of Diseases treated at the PUBLIC DISPENSARY, *(near Carey-Street), London, from Feb. 28th to May 31st,* 1811.

Acute Diseases.

	No. of Cases.		No. of Cases.
Synochus	22	Inflammatio pudend.	1
Febris infantum	7	Varicella	1
Cynanche tonsillaris	3	Rubeola	3
——— parotidœa	1	Scarlatina anginosa	2
Pleuritis	3	Herpes zoster	1
Peripneumonia	13	Erysipelas	3
——— notha	2	Hydrocephalus	3
Pertussis	13	Dysenteria	13
Catarrhus	99	Abortus	2
Peritonitis	4	Rheumatismus	9
Hysteritis	2	Arthritis rheumatica	4

Chronic Diseases.

	No. of Cases.		No. of Cases.
Dysecœa	1	Hepatalgia	4
Cephalæa	17	Marasmus	7
Morbus cerebri organicus	1	Tabes mesenterica	2
Cynanche chronica	2	Tumor abdominis	2
Ptyalismus	1	Hæmorrhagia intestinalis	2
Catarrhus chronicus	41	Tænia	1
Asthma et Dyspnœa	3	Nephralgia	4
Hæmoptysis	11	Dysuria	3
Phthisis	16	Enuresis	2
Palpitatio	4	Hysteralgia	2
Dyspepsia	41	Amenorrhœa	3
Vertigo Dyspeptica	2	Dysmenorrhœa	6
Gastrodynia	12	Menorrhagia	6
Vomitus	3	Leucorrhœa	13
Pyrosis	4	Gonorrhœa	3
Hæmatemesis	5	Blenorrhœa	1
Enterodynia	14	Hysteria	3
Diarrhœa	12	Epilepsia	2
Colica Pictonum	1	Chorea	1

Chronic Diseases continued.

	No. of Cases.
Melancholia	1
Hypochondriasis	4
Paralysis	5
Tremor paralyticus	1
Tabes post variolam	1
Cachexia syphiloidea	1
Rachitis	3
Scrofula	3
Asthenia	24
Rheumatismus chronicus	29
Lumbago et Sciatica	3
Pleurodyne	1
Hydrops totius corporis	3
Anasarca	3
Anasarca post scarlatinam	1
Ascites	1
Aphthæ	1
Erythema	3
——— nodosum	1
Impetigo	6
Prurigo	6
Porrigo	4
Acne	1
Lichen	2
Scabies	4
Psoriasis	4
Purpura hæmorrhagica	1

The spring has been favourable to vegetation, which advanced earlier than for several years back. This probably arose from an unusually clear state of the atmosphere, which admitted of a constant direct influence of the sun, during the whole of the month of March, followed by a mild temperature during the greater part of April and May, with occasional heats, lasting for two or three days. The wind was from the east, however, during March, and frequently in the following months; whence the evening and night air was generally chill, especially in March, and was the more felt from the contrast with the morning sunshine, especially by those whom the latter had induced to discard their winter garments. March was uniformly dry; some mild rains occurred in April; and May has been rather showery throughout, with several smart thunder storms.

The frequent vicissitudes, and the general chillness of the evenings, may be sufficient to account for the continuance of catarrhal affections, many of which were of considerable severity, during a spring which has been, on the whole, mild. They continued to preserve the same character, which had marked the catarrhs of the winter; namely, to exhibit a greater degree of feverishness and depression of strength, than was proportionate to the state of bronchial inflammation: but we have not observed any other approximation to the character of influenza.

The instances of mild continued fever have been rather numerous; but, as usual, presenting themselves under a variety of forms, never assuming a typhoid appearance, nor spreading from individual to individual, and generally not lasting above ten or eleven days, and terminating well. In a word, these fevers have

been of the same nature as those mentioned in the last report; except that a greater number of them have appeared to be more immediately connected with gastric derangement. We have seen none, in which any approach to delirium, or other symptom of affection of the head, occurred.

The hooping cough has been unusually prevalent in our district, and in a few instances fatal, in consequence of the supervention of pneumonia and effusion, by which respiration is finally stopped, and a considerable lividity of countenance takes place several days before death. We believe that no instance of pneumonic inflammation is generally found so difficult of management, as that which supervenes upon hooping-cough; since it seldom takes place until the little patient is greatly reduced in flesh and strength, by the continued irritation of the disease for a considerable period, and when of course evacuations, sufficient to remove the inflammation, are not to be borne with safety. Of two children, carried off in this way, one was a delicate infant, and the other a child of three years old, who had already exhibited unequivocal marks of scrofula. Arsenic has been recommended for the cure of hooping-cough, and by no less authority than that of Dr Ferriar; we should, therefore, hesitate in rejecting it upon a brief trial: But, in three cases, it appeared to have no obvious influence on the disease; while, under the use of digitalis with slight anodynes, the little patients seemed to improve. At the same time, it must be acknowledged, that their progress was so slow, as to excite much doubt, whether the amendment were the result of the operation of the medicine, or of the spontaneous movements of the system. In truth my experience does not lead me to be very sanguine in my expectations of the powers of drugs over this disease: the milder cases will generally disappear spontaneously after a certain course; and the more severe ones do not, I think, readily yield to the same active treatment, which is ordinarily successful in simple pneumonia. There is room for much fallacy, and therefore necessity for much caution, in drawing inferences respecting the operation of medicine, in diseases of slow progress and considerable duration, in which no marked change speedily ensues, and where the natural tendency, in a large majority of cases, is to recovery. Hence there is perhaps no disease, for which so many *specifics* and infallible nostrums are promulgated with confidence, or so few actual remedies known, as for the complaint in question. I speak, however, under correction; since the irregular attendance of mothers with their children at a public Dispensary, where this disease has chiefly occurred to my observation, scarcely affords a sufficient ground, perhaps, for decision.

A healthy girl, of nine years old, was brought to the Dispensary, affected with a copious discharge of a thick greenish yellow matter from the vagina, which continued obstinately for some time. No violence was believed to have been used, nor any accidental circumstance to have happened, which could account for its occurrence. A few years ago another girl, rather under that age, was brought to the Dispensary under a similar condition; but in this instance it was ascertained, that some young man, probably influenced by that mischievous popular notion, that a gonorrhœa may be got rid of by communicating it to a female, who has never suffered the disease, had introduced what the child believed to be his finger into the vagina. There cannot probably be much doubt, that such a communication had taken place in the present instance: for it may be questioned, whether, in a ruddy child, with every appearance of sound health, and before the uterine system is evolved, any copious purulent discharge should occur from the vagina, and continue for a considerable time, except from the introduction of the gonorrhœal poison.

The case of chorea occurred in a *boy* of eleven years old, and affected principally the limbs of the right side, insomuch that he walked ill, and was unable to use his pen at school, and even to feed himself with the right hand. Having been on the whole disappointed in trusting to purgatives alone for the cure of this disease, I put him upon a course of powders, consisting of the oxyd of iron with rhubarb, in such quantity as to operate gently on the bowels every day; which he has adopted with a gradual, but decided amendment from the time of his admission, the bowels being occasionally cleared by a more active cathartic.

The term *cachexia syphiloidea* is employed by my much respected colleague, Mr John Pearson, to denote a state of general bad habit, connected with many symptoms resembling in their nature and progress the secondary appearances of syphilis; particularly various blotches and ulcerations of the skin, affections of the throat, tumors, &c. with great debility and emaciation. The disease assumes a great variety of form, and appears to be most effectually treated by preparations of sarsaparilla, when that medicine is genuine, together with the warm salt bath, sea-bathing, and other circumstances that contribute to restore vigour to the habit. In addition to what Mr Hunter and Mr Abernethy have given to the public on this important subject, the result of Mr Pearson's ample experience would be extremely valuable in the elucidation of this yet obscure form of disease.

London, 31*st May*, 1811. T. B.

Table of the Cases of Hernia which occurred in the Hospital of Manchester in the course of Nine Months. By Mr Robert Lyall.

The following table is made out from a daily statement of the patients of the Manchester Dispensary, whom I furnished with trusses, in the course of nine months. It is a table which is of no practical importance, being merely an object of curiosity; but as such statements can be formed on an extensive scale only, where a great number of patients are admitted, I have thought proper to transmit it to you.

Trade.	Right side.	Left side.	Both sides.	Inguinal.	Scrotal.	Crural.	Congenital.
	Cases.	Cases.	Cases.				
Weavers, - -	18	17	12	33	24	2	
Dyers, - -	4	3		1	6		
Labourers, -	2	1	2	4	2	1	
Fustian-Cutters and Dressers	3	1	2	3	4	1	
Smiths, - -	2	2		2	2		
Spinners, - -	1	2	2	5	2		
Shoemakers, -	1	1		1	1		
Calico-Printers,	2		1	2	2		
Joiner, - -	1			1			
Miner, - -	1				1		
Pedlar, - -	1					1	
Hatter, - -	1			—	1		
Carter, - -		1			1		
Velvet-Dresser,	1			1			
Pipemaker, -			1	1	1		
Boys, - - -	4			2	2		
Children, - -	13	4		3	9		5
Females, - -	1	3	1	4		2	
	56	35	21	63	58	7	5

It is probable that two or three cases among the children, marked *scrotal*, were *congenital hernia*, as the hurry of business, and the difficulty sometimes of determining this point, prevented that accuracy which I could have wished.

One of the weavers, who had an inguinal hernia on the left side, and a scrotal hernia on the right side, was likewise troubled with a ventral hernia, situated about four inches above, and nearly in a straight line with the umbilicus. The patient said that sometimes the ventral hernia was as large as a hen's egg; but when I saw him it was not more than half that size.

"His victuals (to use his own words) sometimes stopped at the swelling" till rejected. The hernia was readily reduced; and then a small circular opening, into which the point of the finger could be put, was easily distinguished.

N. B.—A number of cases of umbilical hernia, both in children and adults, appeared at the Dispensary; but I have no regular account of them. The adults were all, and the children mostly, females.

To the Editor of the Edinburgh Medical and Surgical Journal.

SIR,—You will confer an obligation on the Medical Society of Edinburgh, by inserting in your valuable Publication the following paragraph.

The Royal Medical Society of Edinburgh will give a set of books, or a medal, of five guineas value, to the author of the best experimental essay in answer to the following question.

"Does any decomposition of acids and alkalies take place in their uniting to form neutral salts, according to an opinion advanced by Mr Davy in respect to the muriates?"

Honorary, extraordinary, and ordinary members of the Society, are alone to be invited as candidates.

The dissertations are to be written in English, Latin, or French, and to be delivered to the Secretary on or before the first day of December 1812; and the adjudication of this prize shall take place in the last week of February following.

To each dissertation shall be affixed a motto, which must also be written on the outside of a sealed packet, containing the name and address of the authors. No dissertation will be received with the author's name affixed; and all dissertations, except the successful one, will be returned, if desired, with the sealed packet unopened. I am, &c.

Edinburgh, 19th April, 1811. ALEX. CUMMING, Sec.

Prize-Questions proposed by the Harveian Society of Edinburgh, for the Years 1811, 12, *and* 13.

IN the year 1777, the Harveian Society of Edinburgh adopted the plan of proposing prize-questions, with the view of promoting experimental inquiry among the students of medicine at the university. During several years, this competition was attended with the best effects: And some students gained no inconsiderable reputation as the reward of their industry and genius. But, for some time past, in consequence of particular circumstances, this plan has been interrupted. The Society, how-

ever, has again resolved to resume it, by proposing, as the subject of competition for this year, 1811,

An Experimental Analysis of Diabetic Urine.

Dissertations on this subject must be transmitted to Dr Duncan *senior*, physician in Edinburgh, principal secretary to the Society, on or before the 1st of January 1812. Each dissertation must be accompanied with a sealed letter, containing the name and address of the author, and marked on the back with any particular motto. The same motto must also be prefixed to the dissertation to which the letter belongs.

The only prize given by the Society to the successful candidate, is a copy of the quarto edition of Dr Harvey's Works, published by the College of Physicians of London. But he is left at liberty to employ his dissertation afterwards, in any way he may think proper. And accordingly, different dissertations presented to the Harveian Society, have, in consequence of publication, been productive of considerable honour and emolument to the authors.

The question proposed for 1812 is, "An Experimental Essay on the best method of preparing a Soporific Medicine from the Lactuca sativa."

And for 1813, "An Experimental Essay on the Effects of the Succus spissatus Lactucæ sativæ on the human body."

ERRATA.

Page 301, l. 41, *for* alternately *read* alternated.
302, l. 10, *for* immunity of pain *read* immunity from pain.
305, l. 13, *for* crime called *read* crime and called.
— l. 15, *for* relapfed *read* relaxed.
308, l. 40, *for* increafes *read* ceafes.
309, l. 38, *dele* the period after *urine* and continue the fentence.
317, l. 1, of title, *for* Rhubarb *read* Magnefia.

Communications from Dr Anderson, Mr Smith, Mr Grohegan, and Mr Spalding, arrived too late for insertion in the present Number.

*** Communications may be addressed to the Editors, to the care of Messrs Constable & Co. Edinburgh; Longman & Co. London; and Messrs Gilbert & Hodges, Dublin.

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THE

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MEDICAL AND SURGICAL JOURNAL.

1. OCTOBER 1811.

PART I.

ORIGINAL COMMUNICATIONS.

I.

Cases of Pulmonary Consumption, treated by Regulated Temperature. By Isaac Buxton, M. D. Physician to the London Hospital.

During the spring of the year 1810, I had six patients under my care, each of whom, by my desire, employed in his chamber a regulated temperature. It was likewise recommended to two others, and for a time partially employed. In one of these cases, the patient was in a consumption, so far advanced that I did not consider any assistance as likely to prove useful, and therefore did not urge this or any other remedy very strongly. In the other case, a regulation of the temperature in the patient's chamber, appeared to me to be of evident utility for a short time. I could not, however, prevail on her to continue its use; and she afterwards sunk under the ravages of her complaint. I mention all the cases in which I used this remedy, with their results, as I consider this a fair method of enabling others to appreciate the value of the means employed. It will be seen that a regulated temperature was by no means uniformly successful. But I think I may affirm it was hurtful in no instance, and decidedly beneficial in several.

Case I.—January 9th. John Brimner, No, 11. Fair Street, Tooley Street, Southwark, a Surry Dispensary patient, aged 64,

ill about three months, but worse during the last two weeks. Cough very severe; breath short; great soreness about his navel when he coughs; bowels regular till yesterday, when he had no evacuation. Has been accustomed for some years to a cough in cold weather; but never was so severely affected as at present.

El. cath. stat.
Em. ol. ant. anod. cum tinct. scill.
Episp. perpet. scrobiculo cordis.

12th.—Cough not so severe; bowels confined; blister discharges still.

Mist. cath. ant. cum tinct. scill.
P. coloc. cum calom. ij. o. n.

16th.—Bowels open when he takes the pills; was very sick three days ago; cough rather increased, particularly at night; in consequence of this has had no rest during the last two nights; blister discharges a little. Pergat.

19th.—Cough still severe; mixture makes him very sick; blister discharges but little.

Ep. perp. sterno.
Em. ol. ant. anod. cum tinct. scill.
P. coloc. cum calom. ij. o. n.

25th.—Cough extremely bad; very weak; perspires much at night; expectorates with difficulty; blister discharges; bowels rather confined.

30th.—Nearly as he was; very sick; medicine makes him so; vomits much with the cough; blister does not discharge. P.

Ep. perp. scrob. cord.

February 2d.—Very little difference; not so sick as he was; blister discharges much. P.

Linct. expectorans.

6th.—Extremely ill, cough being excessively severe; bowels regular in consequence of the medicine; vomits a little when the expectoration does not rise freely; blister discharges. P.

9th.—Is lower; very hoarse; throat sore; sleeps much; coughs very much about three in the morning, and continues to do so till eight; blister discharges, but not much; appears to be sinking. P.

Linct. ammon. fort. gutt. bis de die.
Episp. perpet. sterno.

Earnestly recommended regulated temperature.

13th.—Was pleased to find my recommendation adopted; the room being small in which the patient remains, and a fire burning in it by night as well as by day, the temperature appears to be kept up without much difficulty to 60° at the bed's head. Last night he slept, without being much disturbed by the cough; his

mouth is sore from the mercury contained in the aperient pills; blister discharges well. P.

Pil. aloes cum myrrho. ij. o. n. vice pil. coloc. cum calom.
Gargar aluminis.

16th.—Better during the last two days; but last night the cough returned; mouth less affected; pills keep his bowels regular; appetite improved. P.

20th.—Rather better; blister discharges much. P.

27th.—Bowels much inclined to constipation; cough diminished. P.

Pulv. cathart. p. 2. n.

13th April.—Not quite so well; blister quite dry. P.

Empl. pic. Burg. scrob. cord.

20th.—Cough worse; does not rest so well at night; bowels more regular. P.

Empl. canthar. scr. cord.

27th.—Cough relieved by the blister. P.

May 6th.—Cough better; this day came to the Dispensary; stronger. P.

17th.—Cough diminished; strength and appetite much improved. P.

From this time the patient discontinued his attendance at the Dispensary; and as the summer advanced, became totally free from complaint.

Case II.—January 17th. Mrs W. aged about 50, has, during the last three or four winters, been subject to cough and dyspnœa. This winter she is affected in the same manner, but is worse than usual, the dyspnœa being very severe, and the cough very violent and frequent in its attacks. She complains of occasional pain at her chest, which is materially increased when she coughs; has pains also over the forehead; tongue rather white; pulse 136; bowels opened once this day; complaints have been aggravated within the last three days. She describes herself as having good health in the summer, and as becoming ill immediately on the approach of winter. But at that time she generally feels tolerably well in a warm room. If she quits the room and goes into the passage, she immediately begins to cough. In cold weather, she is accustomed to lie with her head under the bedclothes, as she finds that she can then breathe with ease; but on removing her head from this situation, she begins to cough immediately.

℞. rhei cum calom. stat.
Lac. amygd. cum vin. ant. tart. et tinct. digit. quater de die.

Catapl. sinap. scrob. cord. statim, et postea
Empl. canth.

Mrs W. was recommended to confine herself to her bed, and to have a brisk fire kept up in the chamber day and night.

18th.—Cathartic operated freely; blister has risen well; patient is much better; breath considerably relieved; cough easier; pulse not quite 100. P.

Cerat. sabinæ scrob. cord.

It is scarcely worth while to detail the symptoms and treatment from day to day. It will, I conceive, be sufficient to observe, that, with some little interruption, the patient gradually amended, so as, on the 29th, to declare herself very well, excepting a degree of debility which still remained. The cough and dyspnœa were scarcely perceptible. Mrs W.'s chamber being large, and a fire in a common fire-place employed to heat the room, the temperature at the bed-side was very various. The lowest point at which I observed the thermometer was 45°, the highest 60°. At this period the weather was severe; and the chamber must have been very materially colder, had it not been for the fire constantly burning.

Case III.—February 3d. Mrs W. aged 37, ill three weeks; attended by Mr Dunkin of Dockhead. Complains of troublesome cough, with dyspnœa and pain in the chest; tongue is covered; sweats much at night; frequently feels cold at the same time; is occasionally rather sick; bowels habitually inclined to constipation; pulse quick and irritated; her mother and sister died of consumption; her chest is narrow; has been occasionally subject to an illness of the same kind as that with which she is now affected; but it never before reached the same degree of severity as it now has. The weather has lately been severe, and she attributes her illness to considerable exposure.

Mist. nitros. cum vin. antim. tart. et tinct. digit. gtt. x. 4ter de die.
Haust. cathart. stat.
Empl. cantharid. scrob. cord. et postea cerat. sabin.

6th.—Blister drew well; but does not now discharge much; patient was rather better till yesterday afternoon, when, her bowels being confined, she became sick; thinks the cough and other symptoms nearly as before; tongue yellow and covered; threw up an opening draught this morning. P.

Extr. col. comp. gr. viij. Calom. gr. ij. stat.

Ordered the skin raised by the blister to be removed, and the temperature of the chamber to be regulated as nearly as possible to 60°.

9th.—Cough diminished; the temperature of the chamber at

the bed's head 67°. It appears to be kept up very well, as the room is small, the fire constantly preserved, and the stove proportionally large. Complains of the air which she breathes occasionally feeling hot; bowels open; tongue cleaner; pulse about 80. P.

19th.—Coughs very little; is rather weaker; pulse 60; bowels inclined to constipation; blister completely dried up.

Mist. myrrh. cum tinct. digit. gtt. xij. et magn. vitriol. ʒ. 4ter de die.

Empl. pic. Burg. cum empl. canthar. ½ scrob. cord.

17th.—Pulse 60; bowels have been much opened; magn. vitr. has in consequence been laid aside; was restless last night; complains much of heat at her stomach; has a sour taste in the mouth, yet does not dislike acids; coughs but little; temperature of the room at bed's-head 62°.

Mist. acid. nitr. cum tinct. digit.

21st.—Pulse about 72; coughs very little. The weather being extremely cold, experiences a difficulty in keeping up the temperature to a proper height; feels a very sensible inconvenience if it is a few degrees lower than usual. During the last two or three days has perspired considerably; tongue cleaner; rather better appetite.

Dec. cinch. ʒss. cum Ac. nitr. gtt. vj. et tinct. dig. gtt. xij. 4ter de die.

March 7th.—Perspires much; in other repects better.

April 5th.—From the last report to this day I did not see her. She continued, however, under Mr Dunkin's care. During this time, she had nearly or quite lost her cough; her strength was increased, but she still continued much inclined to perspiration; the bowels were kept regular by gentle cathartics; thinks that within a few days she has taken cold; complains of pains in the limbs, stomach, and back; stoppage in the head, and profuse perspirations; tongue furred; does not cough.

M. camph. cum tinct. digit. gtt. x. et mag. vitr. ʒss. 4ter de die

8th.—Pulse about 70; tongue hardly so much covered; bowels disordered last night; pain in stomach much diminished, and that at the back quite gone; perspirations continue.

Inf. cascarill. cum tinct. digit. acid. nitr. et mag. vitr.

After this time I did not visit her, but she was for a considerable period attended by Mr Dunkin, as the perspirations still continued. In other respects she gradually amended; the cough totally left her; she became fatter; and her strength increased so much, that she was far better than she had been during the preceding summer.

Case IV. February 26th.—Mr E., aged about 28; ill nine months; attended by Mr Reid, Mile-end Road. Has cough; shortness of breath; expectoration of mucus, of rather a thick consistence, and yellow colour; pains in the chest and left side; is much worse when he goes out of a warm room into a cold one; is worse likewise at night in lying down; much emaciated. Appetite good; no night sweats; pulse quick; bowels regular. He coughed during the summer; but much more since the weather has become colder. Suffered very much during the late severe weather. Has been in the habit of frequently drinking to excess.

Tinct. scill. gtt. xx. cum tinct. digit. gtt. x. quater de die.
Episp. perpet. scr. cord.

Was directed to confine himself to his chamber, and to keep the room as nearly as possible to a regular standard. A milk and vegetable diet ordered.

March 1st.—Does not cough so much in the day, but still coughs very severely at first lying down at night. Cannot bear the temperature of the room to be raised very high, as he then suffers from the heat. Blister scarcely draws; pulse appears to me softer, but still is quick.

(The patient not having a thermometer, I could not be particular as to the exact degree of heat employed.)

Tinct. scill. gtt. xx. cum tinct. digit. gtt. x. quater de die.
Empl. pic. Burgund. cum emplast. canthar. ½ scrob. cord.

After this period, I did not again see Mr E. Mr Reid, however, informed me, that he kept up a regular temperature in his chamber about a month, during which time he gradually amended; and, as the summer advanced, became free from every complaint.

Case V. February 28th.—Miss S., aged six; ill one month; attended by Mr Reid, Mile-end Road. Pain in the chest; cough; dyspnœa; expectoration small in quantity; skin hot; pulse quick; tongue covered, but moist, and said to be cleaner than it has been; bowels moderately open. Within the last two days, since the weather has become warmer, her complaints are all better. This amelioration has been assisted by a Burgundy pitch plaster on the chest, and by keeping up a constant fire in the chamber, so as to regulate the temperature as much as possible. This appears to be effected very well, as the room is small.

Lac. amygd. cum tinct. scill.

Continue regulated temperature.

March 4th.—Does not cough so much; appetite better; expectorates easily; a little pus appears to be in the expectoration.

Lac. amygd. cum tinct. scill. et dig. gtt. iv. 4ter de die.

8th.—Breath shorter; wheezes considerably; the plaster occasions very little irritation.

Episp. perp. scrob. cord.

Tinct. digit. cum vin. ant. tart.

11th.—The blister has slipped, and in consequence has drawn much over the whole chest. Breath better; pulse about 110; coughs but little.

Mist. nitros. cum vin. ant. tart. et tinct. digit.

15th.—Pulse rather slower; tongue clean; breath easier; blister continues to draw. P.

18th.—Pulse 102; breathing easier; cough not more severe, although the weather is extremely sharp. P.

Aug. tinct. digit.

26th.—Pulse about 90; tongue quite clean; yesterday was much depressed; cough and expectoration trifling; bowels regular; appetite good; blister still discharges.

Inf. colombæ, cum tinct. digit.—Cerat. sabin.

April 1st.—Pulse 104; cough nearly gone; expectoration trifling; blister still discharges much; no pain; does not sweat excepting when she exerts herself; appetite good; bowels regular; appears stronger. P.

Cer. sabin. dilutum.

9th.—Appears in every respect better; appetite improved; a little colour in her cheeks; scarcely any cough; strength somewhat increased; blister quite dry. P.

Empl. pic. Burg. scrob. cord.

As Miss S. was so much improved, I now took my leave of her, with the request that the regulated temperature might be continued till the weather was warm. This was promised, and I have no doubt was carried into effect, as she was attended by her mother with the most anxious care. I was, however, requested to see her again, May 14th, when I found her breath very short, 44 respirations being made in a minute. Coughs occasionally, but not very much; has some pain in her chest: appetite diminished; excessively weak; pulse 112; bowels regular. These symptoms commenced a very few days after I left Miss S. and by almost imperceptible degrees have reached this alarming height. Blistering and other remedies were employed, but without effect. The weakness increased, though the other symptoms di-

minished: and she sunk, apparently the victim of extreme debility, the latter end of the month.

Case VI. March 15th.—Miss A. aged 13; ill six months; attended by Mr Reid, Mile-end Road. Breath very short; cough frequent; expectoration considerable and purulent; labours much in breathing; much emaciated; tongue furred; perspires at night; cannot lie down in bed; pulse indistinct; bowels regular; no appetite. From very early years has been accustomed to a cough every winter; but this winter has been much worse than usual.

Episp. perp. s. cord.
Tinct. digit. gtt. xv. quater de die.
Regulated temperature.

March 15th.—Pulse is now distinct, and I make it about 160. Breathing easier; tongue rather cleaner; does not cough or spit so much; blister draws well; the heat of the room not sufficiently great.

March 18th.—Pulse 136; can lie down in bed. On the whole seems rather better, excepting that within a few days she has coughed rather more. This probably has arisen from the coldness of the weather, which causes the temperature of the room to be much too low, as it is warmed by an open fire-place.

Repr. cerat. sabin.
Tinct. scill. gtt. xv. cum tinct. digit. gtt. xviij. 4ter de die.

24th.—Pulse about 100; tongue moist, but covered at the back, though cleaner at the edges; perspired last night; perspires chiefly about the head; expectoration not so great, but purulent; blistered part continues to discharge. P.

Went to bed last night without any symptoms indicating peculiar danger. Had occasion to rise during the night, which she did without any difficulty, but expired almost immediately after her return to bed.

In reading the above cases, there will evidently be some difficulty in determining how far the regulation of the temperature contributed to the restoration of health in those who recovered, or to the prolongation of life in those who died. This difficulty proceeds from the employment of other remedies at the same time, as thus a pure experiment could not be made. Yet the wish to try such an experiment certainly would not justify our use of this alone, as other remedies, *e. g.* blisters, are of so great power, that a neglect of them might probably, in some cases, occasion the loss of that life which, by their assistance, might have been preserv-

ed. But this argument is equally applicable to a regulation of the temperature, which, if really a powerful and useful remedy, may turn the scale in the patient's favour, where other remedies are not of sufficient weight; and that it is such, may, I think, fairly be argued from the preceding cases. It was most decidedly beneficial to Brimner (No. I.) and to Mrs W. (No. III.) Brimner was evidently sinking under his complaint, and I have not the smallest doubt would have died in less than a fortnight, had not his chamber been carefully heated. In a very short time after the employment of this additional remedy, his amendment was perceptible and decided; and from that time he continued, with little interruption, to recover. The same remedies were still continued which had been previously employed, and during the employment of which he had rapidly declined, when they were unaided by a regulation of temperature. In the instance of Mrs W. (No. III.) the regulation of the temperature in her chamber was commenced so soon after the employment of other remedies, and was so closely combined with them, that it is hardly possible to determine with precision, the degree in which any one, in particular, contributed to her recovery. That she was in a most critical situation, is sufficiently evident from the severity of her symptoms; from her consumptive make; and from the death of two of her nearest relatives by consumption. That the regulation of the temperature was of great importance, is also evident from the circumstance of her always finding the symptoms worse, whenever the thermometer descended a few degrees below 60°, which it occasionally did when the weather was very severe. Mrs W. (No. II.) also generally felt herself, during winter, pretty well, while she continued in a warm room; but began to cough immediately on quitting it for the cold air of a passage. Hence I conceive, that the warmth of the air which she breathed, could not be an object of indifference to her health. Mr E.'s case (No. IV.) will not prove any thing decisive, as there is no circumstance to show that any one remedy employed was chiefly beneficial, though, combined, they certainly were so, as the patient began gradually to amend from the time when they were used; whereas, before that time, his health had been gradually declining. Regulated temperature being one of the remedies resorted to in this instance, must have its share of credit from the patient's recovery. Of the unsuccessful cases (two out of the six) Miss S.'s life (No. V.) appeared to me to be prolonged by the employment of this remedy, although she ultimately fell a victim to her complaint. In Miss A.'s (No. VI.) chamber, the heat was so little raised, that her case can scarcely be considered as one in which regulated temperature was used. Not that this cir-

cumstance appeared to me of material consequence; for her disorder was so far advanced, that I believe no remedy, or conjunction of remedies, would have saved her.—Before I conclude this paper, I beg leave to make a few remarks on the mode of preserving a regulated temperature. In an essay which I published the latter end of 1809, I recommended the common shop or ironing stove, as far preferable for this purpose to the open fire-place. My opinion on this point is still precisely the same as it then was. When the room is large, and the weather is cold, there is very great difficulty in keeping up the temperature at the part farthest from the fire to 60° or 65°, if the open fire-place is employed. In Mrs W.'s (No. II.) chamber, I never saw the thermometer higher than 60°, although a large fire was constantly burning, and once it was as low as 47°. In Miss A.'s apartment (No. VI.) I repeatedly noticed in my reports, that the heat was not sufficienty great. In those rooms, where, from their smallness, and the lowness of the ceiling, the heat can be best preserved, there still occasionally will be some difficulty in very cold weather. This was experienced by Mrs W. (No. III.) When it is necessary to raise the fire very much, in order to preserve the proper temperature at the distant parts of the room, those who are obliged to approach the fire, experience inconvenience from its rays. The common shop-stove is, in a considerable degree, free from these inconveniencies, is easily fixed, and does not burn so many coals as the open fire-place. Its price is also very moderate. I believe, that for a middle-sized room, the expense of the stove itself, and of fixing it up, would scarcely exceed thirty shillings.

Fenchurch Street, July 4th, 1811.

II.

On the use of the Couching-Needle in Infants of a few Months Old.

By Benjamin Gibson, Surgeon, Manchester.

Whatever objections have been urged against the safe and effectual use of the couching-needle in infants, have always appeared to me so slight, and so easily surmountable, that, without inquiring particularly into the real state of the question, I have long concluded in my own mind, that the same motives

which would induce an operator to couch a cataract at any period of adult life, would equally lead him to perform that operation at any earlier period, when a cataract might exist. Acting upon this presumption, I have operated upon children of all ages, for ten years past.—The use of the couching-needle in children, has not, indeed, been particularly pointed out by authors who have written upon the subject of the cataract, but I have attributed their silence on this head, principally to this circumstance; that, as there can be no great difference between the mode of using the couching-needle in adults and infants, many authors may not have thought it necessary to particularize the age. Some writers, however, have mentioned the subject.——Upon looking into Mr Hey's excellent remarks upon the operation of couching, I find a case related, in which he used the needle with success upon the eye of a child two years old. It is, perhaps, unfortunate for the public, that the subject of his operation happened to be unmanageable, and that the rolling motion of the eye, and the power of retracting the eye-ball within the orbit, offered impediments to the use of the couching-needle, which induced that eminent operator to relinquish any farther attempts. It is unfortunate, also, that the patient operated upon was not six months old instead of two years: in which case, the obstacles arising from the rolling and retraction of the eye, would not have existed; and Mr Hey's superior judgment, aided by the experience of a few similar cases, would soon have discovered the general facility and uniform efficacy of performing the operation of couching upon infants a few months old. Besides Mr Hey, Mr Ware and others have furnished the profession with cases, in which the couching-needle was successfully used a few years after birth. Mr Ware, indeed, appears to have been long deterred from adopting this operation at all ages, merely by having given an unconditional preference to, and by having placed implicit confidence in the operation of extraction. So injudicious a prejudice in favour of either of these operations exclusively, is now fast declining; and oculists begin to discover, that although the operation of extraction is more immediately decisive and effectual, yet, under circumstances unfavourable to its performance, the couching-needle is an instrument infinitely better calculated to insure success.——Mr Hey, and Mr Ware, with their predecessor the great Cheselden, having thus shown the practicability, as well as the efficacy, of using the couching-needle, at an age when the steadiness and resolution of the patient could not be depended upon, what merit is left for any of their successors, except it be that of reviving and extending the benefits of the operation, by making their experience public, after having fully ascertained, *that the infant of five or six months old is a more favourable sub-*

ject for the use of the needle, than at two years, or any subsequent age?

In addition to the efforts of these eminent practitioners, I may observe, that two or three years ago, I had noticed in the reports of the London Institution, for the cure of diseases of the eyes and ears, which reports I found dispersed and exhibited in the public news-rooms of this town, that the cataract in infants was removed by the late oculist to that Institution, by an operation peculiar to himself. Since, however, the operation performed for this purpose, as well as the instrument by which it was effected, appear to have been, in a great measure, carefully and intentionally concealed from the profession at large, I am doubtful of the use, or even the propriety, of alluding to the practice of such an individual upon this occasion. By the annual proclamation of his success, he has, as yet, only excited the curiosity of his brethren. How far any hopes, they may have formed, will be realized; or what may be the nature or merits of the operation, or the form of his instrument, time alone can disclose. In the mean while, since I have reason to believe that the operation of couching the cataract in infants is by no means so general, as, from the facility of its performance and success it deserves to be, I shall proceed to state the general result of my experience in a considerable number of cases.

In performing the operation of couching infants, it has always appeared to me, that the advantages to be gained by restoring vision at so early a period, are so important, as to bear down any obstacles which may occasionally be opposed to the safe use of the needle. Even the risk of deranging the figure of the pupil, forms no solid objection to its use; and may always be avoided by steadiness and good management. Should even a slight change in its figure be produced, it is seldom in the least detrimental to distinct vision, and can scarcely be considered a blemish in the eye of any one, except perhaps in that of a geometrician; who may not easily reconcile to himself the presence of an oval opening, where one of a circular form should exist. It may farther be observed, that if an operator cannot depend upon his management of the eye, so as to render it steady by the introduction of the couching-needle, he can avail himself of the assistance of a speculum to restrain its motions.

The following observations will apply principally to infants under twenty months old. The advantages, which an operator possesses in operating upon a child of this age, as compared with a child of three years old, or upwards, are important. An infant is not conscious of the operation intended: it is free from the fears created by imagination, and can oppose very feeble resistance to the means employed to secure it with steadiness. At

an early age it has not acquired the power of retracting the eye deep in the socket, so that the operator has always a good prospect of introducing the couching-needle with ease, by watching a proper opportunity. The eye has not, at this time, acquired the unsteady rolling motion which, after a few years is so common and remarkable in children born blind, or reduced to that state soon after birth. So that this impediment to the easy introduction of the needle does not exist in infants a few months old. The operator also, has it in his power to administer a dose of opium, sufficient to render the steps necessary to expose the eye, almost entirely disregarded by his patient.——With respect to the state of the eye itself, but particularly that of the cataract, this is more favourable for the operation, than at any future period of life. In infants the cataract is generally fluid, and merely requires the free rupture of its containing capsule, which is in that case generally opaque. The capsule, however, is tender, and easily removed by the needle, so as to leave an aperture sufficiently large for the admission of light. The milky fluid which escapes from the capsule, is soon removed by absorption.——If on the other hand, the cataract should be soft, it is generally of so pulpy a softness, that the free laceration of the anterior part of its capsule, and the consequent admission of the aqueous humour, ensures its speedy dissolution and disappearance, without the necessity of a second operation. Should the cataract happen to be hard, there will be no more difficulty in depressing it than in an adult. So uniformly favourable is the state of the cataract to the success of the operation, that I may venture to pronounce, that an operator of common experience and expertness, will seldom fail of success, if he can, in an adult, depress a hard cataract, or rupture the containing capsule, and break down the substance of a soft or fluid cataract when it occurs.

Such are the advantages derived from the age of the patient, and state of eye, which would induce an operator to use the couching-needle a few months after birth. If however a surgeon had even difficulties to encounter, which do not occur in adults, surely the invaluable benefit conferred by enabling an infant to become an intelligent being like other children, instead of remaining in a state approaching to idiotism, would incline him to run some risk of failure, and to make more than common exertion, especially as there is little chance of injuring the eye, when proper precautions are used. Yet so important a consideration appears to have had little influence upon oculists, and hence many children have been doomed to years of darkness, happy, in the estimation of their parents and friends, if they could distinguish black from white; or discern any perceptible difference be-

tween the brightness of the sun and the glimmering of a tallow candle.

These advantages which an operator will possess, when he attempts the removal of a cataract in a child of a few months old, are peculiar to that period. In proportion as the age of the patient advances, until he arrives at the age of discretion, and can estimate in some measure the value of sight, by feeling his loss, the difficulties opposed to the use of the couching-needle increase. His fears of the operation, the unsteadiness of the eye, and his power of retracting it within the orbit, present considerable, but not insuperable obstacles; such, however, as every surgeon would willingly dispense with, if he had it in his power.

Before an operation, at an early age, is recommended, the practitioner ought (as in any other age) carefully to ascertain that the cataract is not complicated with a defective state of the retina, or with a complete amaurosis. Such cases are by no means uncommon. Some years ago, I recollect to have seen five or six children, the families of two sisters, who were all totally blind, and in an idiotic state, with cataracts accompanied by amaurosis. It does not, however, enter into my present plan to point out the symptoms by which these states are distinguished from each other.

In using the couching-needle upon the eyes of infants, the only deviations from the usual steps of the operation, are principally in the mode of securing and preparing the patient. I have always ordered an opiate a few hours before the operation, sufficient to produce a considerable degree of drowsiness, so that the infant in general allows its eyelids to be opened and properly secured, without resistance, and is little inclined to offer any impediment to the introduction of the couching-needle; but, on the contrary, presents the sclerotica to view, naturally turning up the white of its eye. If the infant be more than a year old, or whenever it may be necessary, I introduce its body and arms into a kind of sack, open at both ends, furnished with strings to draw round the neck, and tie sufficiently tight round the legs, so that its hands are effectually secured, and the assistants have only to steady its body and fix its head, whilst the child is laid on a table upon a pillow. I have never found it necessary to use a speculum, having uniformly found, that after the couching-needle was introduced, I had no difficulty in commanding the eye, aided by a slight degree of pressure upon the eyeball with the fore and middle fingers of my left hand, used to depress the under eyelid. The speculum, however, can easily be applied, if an operator prefer it. I have generally used Professor Scarpa's needle, because in infants the free rupture of the capsule of the lens ought common-

ly to be aimed at, that the milky cataract may escape and mix with the aqueous humour; or if the cataract be soft, that the aqueous humour may be freely admitted to its pulpy substance, previously broken down by the needle. The depression of the hard cataract in infants, has nothing peculiar in it. Before Professor Scarpa's needle was known in this country, I used Mr Hey's, which was generally effectual, and possesses the recommendation of being less liable to have its point engaged with the iris. When a milky cataract has been thus evacuated, it mixes with the aqueous humour and renders it turbid; but generally within the space of two days, the eye acquires its natural transparency, and vision commences. When the capsule and substance of the soft cataract has been broken down, and the aqueous humour has come into contact with it, the solution and disappearance of the cataract have uniformly taken place, in a short time, in all the cases upon which I have operated. Although I have met with cataracts in infants hard enough to bear depression, yet I never met with a simple membraneous cataract; though this is no uncommon occurrence in patients, at the age of eight or ten, as well as in adults who have been blind from birth. Within a few weeks I have operated upon three patients, about ten years old, who had simple membraneous cataracts in both eyes; and I am strongly of opinion, that at any earlier period these cataracts had been of the milky kind; and that the fluid having been absorbed, the opaque capsule which originally contained it, now formed the membraneous cataract. In such cases, the opaque membrane may generally be broken down by Mr Hey's or Scarpa's needle. I have found from experience, however, that a patient of the age of ten or fourteen years, is occasionally disposed to be very unmanageable; so that I have generally been content, in such a case, should I have succeeded in restoring the sight of one eye, to leave the other until my patient has fully learned to estimate the blessing of sight.

There are several other strong reasons for performing the operation at an early period, independent of those already mentioned. Few practitioners, at all conversant with cases of blindness from birth, will deny, that it is highly probable that the eye may lose a considerable part of its original powers, from the mere circumstance of its having so long remained a passive organ. Hence probably it happens, that, in some cases of congenital cataract, the only benefit conferred on the patient by an operation, is that of enabling him to find his way in an awkward manner, and to discriminate the more vivid colours. Such patients have never been able to discern small objects, or to judge, in any useful degree, of figure or magnitude. I am well aware, how-

ever, that in some rare instances, such a defective state of the eye exists from birth.

Another circumstance, which must have attracted the attention of oculists, is, that, in a few years, the eye of a patient born blind, acquires a restless and rolling motion, which is at length so firmly established by habit, that he has little controul over it. This motion unfortunately continues for a considerable time after sight has been restored to such a person, and is a very material obstacle to the early attainment of a knowledge of the objects of vision. He cannot fix his eye steadily upon one point for a moment, and the inconvenience which arises from this unsteadines is, to such a person, occasionally as great a bar to the distinct view of an object, as the unsteady motion of the same object would be to one whose vision is perfect. This inconvenience any one can appreciate, and, as far as I know, it is completely avoided by restoring sight at an early age.

It will be almost unnecessary for me to urge the most important, and at the same time the most obvious of all reasons, for removing the cataract at an early period; I mean the loss of those years which ought to be spent in education. The arguments which have been already used in favour of the early performance of the operation, will, I hope, prove sufficiently strong to induce practitioners to adopt it; and should occasional obstacles occur, they must be met with steadiness and caution. By this means, I trust, their efforts will be uniformly crowned with success, and the greatest of all blessings be conferred at a time when it is most required.

Portland Place, Manchester, June 13, 1811.

III.

Cases of Strangulated Hernia; with Remarks, and further Reflections on that Disease. By Edward Geoghegan, Surgeon in Dublin.

In December last, a gentleman aged 60, who had had a reducible hernia 30 years, was suddenly seized with the symptoms of strangulation whilst walking the street. After about two hours I saw him. There was a large portion of intestine in the scrotum, and great tension and pain at the ring. I endeavoured, by the

application of cold water and ice to lessen the size of the tumefied parts, avoiding the taxis. Having pursued this plan an hour without success, and finding that the sensibility of the part had decreased, I then made a trial with my hands to press out the contents; but their passage was interrupted. The general distress increasing, eight ounces of blood were taken from the arm, a purgative glyster was administered, and, after some fæces were discharged, a weak infusion of tobacco, to which languor succeeded. In this state I applied the hands, and was surprised at not feeling the testicle on that side: the patient informed me, that it had never descended so low as the other, was much smaller, and had sometimes ascended into the belly, particularly when returning his hernia. On a minute examination I discovered the testis as a plug in the aperture, by its pressure closing up the intestinal tube, and impeding the circulation, thus producing the strangulation. I endeavoured to remove the testis, but failed. The pulse having increased in frequency and hardness, four ounces of blood were taken away, which was succeeded by an abatement of the pain, and greater regularity of pulse. Despairing of being able to remove the obstructing cause without exposing the parts, I proposed the operation, to which consent was refused. I directed all my efforts towards dislodging the testis, which at length succeeded: the hernia became diminished in size, and the strangulation yielded. This took place on the third morning after the attack.

In April 1811, I was called upon to see a female, who was seized about six hours before with strangulated hernia; she was young and robust. I took blood from her arm until she swooned; and put in practice the usual means, of which I approve, but unsuccessfully. She resisted the operation until the fourth day; in the interim she lost about fifty ounces of blood. On laying the sac bare, it was gangrenous, and readily broken in threads by a director; the intestine was chocolate-coloured. These appearances, and the length of time the disease had continued, inclined me almost to despair of success. I incised the tendon about one-eighth of an inch, within about half an inch of the pubes, grasped the intestine between my fingers and thumb, gently pressed its sides together, until it was emptied; it then returned with the greatest ease, and she recovered.

I am induced to communicate the first case on account of its singularity; also as affording an instance in which strangulation was produced, independent of the aperture, by the mechanical pressure of an adventitious body, and in which the practice I oppose was contra-indicated; all attempts in the usual way would have increased the mischief: It clearly illustrates the *rationale* con-

tended for in my late publication; namely, that the indication of cure was not the return into the abdomen of the protruded parts, by pressing them up with the hands in the direction of the aperture; that the apertures were passive, and only secondarily concerned; and that a pervious state of the intestinal tube, and abatement of inflammation, were the sole indications, requiring for their fulfilment a manual effort totally different from that which is universally laid down, and of which they strongly mark the impropriety.* I introduced the next case, to show the advantage of copious bleeding; to which I attribute in a great measure the successful termination. That such a subject could have escaped diffused inflammation, and its consequences, during four days that she suffered under femoral hernia, by far the most dangerous kind, on account of the smallness of the aperture, is scarcely to be conceived. It also exemplifies the manner of treating the intestine (after being exposed in the operation), which I advise; I held it within my fingers and thumb until it became flaccid, without any view to replacing it in its tumefied state. The universal practice is, after cutting the tendon, to endeavour to return it; and, if it is too large for the opening, to dilate still further, until the aperture admits of its easy return. Now, there is a wide difference between returning a tumefied and a flaccid intestine; the former will require a large incision, the latter a small one, which is a point of great moment. Were it granted, as I contend, that to admit the return of the contained air was sufficient, a large incision would never be deemed necessary in mere intestinal hernia; the slightest alleviation of the compression would admit of its escape. I have seen this operation performed by surgeons who were distinguished as dexterous, and they always pushed the hernia towards the opening; and if its entrance was impeded, they enlarged the incision, and exerted considerable force to effect its replacement; and the event was often fatal. About eight months ago, I saw a surgeon of great experience in England perform the operation. As he pressed the intestine towards the opening, it slipped in all directions through his fingers. After enlarging the incision twice, he was still foiled in his attempts; at length he applied both hands, raised himself on his toes, and, bringing to bear all the force he could exert, drove the inflamed bowel before him. Now, after the tendon had been freely cut, the tumefied state must have been kept up by stricture further in; or the ag-

* Mr Hartigan saw both these patients on consultation. On my stating the first case, he judiciously remarked, that the general practice of pushing up would be improper here,—that we should pull down.

glutination of the intestine, which had taken place during the strangulation, must have continued: in either case, the resistance was in the impelled body itself; and until it was removed, the return of the hernia ought not to have been attempted.

In endeavouring to relieve strangulated hernia, I contend that theory and practice correspond in support of the opinion I have advanced, as to the indication of cure, and the manner of carrying it into effect. In further illustration I shall suppose a case of ordinary occurrence. An hernia shall remain displaced a length of time without any ill consequence; on a sudden it shall suffer external violence, or from bodily exertion an increased quantity shall rush down; it becomes enlarged, and violent symptoms ensue: Nothing can be more clear than that these symptoms were not produced by the displacement, and, of course, that the cure does not consist in the replacement. No; the strangulation is a new disease, which has supervened upon the protruded parts; and, agreeably to a fixed law of the *ars medendi*, the supervening disease is always to be removed first. The removal of the original is an after consideration, and may require distinct means: this is a distinction of the first importance, essential to ground a rational practice upon. Inflammation has supervened upon a part of tubular structure; and it should be borne in recollection that it is double, and forms as it were two tubes within a small opening; the natural contents are air and some fluid fæces; these tubes become obstructed; hence inflation and impeded circulation. The remedy for this state surely is the removal of the inflammation and tubular obstruction; because, previously to their occurrence there was no strangulation, although the intestine was *protruded.* How can we then reconcile the established opinion, that the indication of cure, nay, the very *first indication*, is to replace in the abdomen (where it might not have been for months before) this inflamed mass, and to effect this by pushing it forcibly through the aperture, which is already too confined to contain its smallest part? One would think, that an hernia, which lay at ease in the scrotum for some time, would not require to be *forced* out of its situation, to relieve an inflammatory attack upon it. In pressing up this inflated and folded tumor from the bottom, surely it will divaricate as much as the sac will allow, which will weaken its force, and in every step oppose the intention, besides the mischief to be dreaded from the resistance of tendinous parts, and, in femoral hernia, of the bone. Was the indication correct, the bulk of the hernia must prevent its fulfilment. Herniæ of small size are sometimes exceptions to this, but by no means proofs of the efficacy of the practice: in many such instances the indication has been fulfilled, yet the termina-

tion was fatal, and the hernia has been found within the abdomen still strangulated. There is a case in the Philosophical Magazine for September 1810, by Mr Taunton, in which an hernia was with great difficulty pushed inside the abdominal ring: the symptoms continued, and it proved fatal. On examination it was found situated on the anterior part of the spermatic process, between the peritoneum and abdominal muscles, still strangulated, not by the apertures, but by the peritoneum. All the viscera were in a healthy state; from which Mr T. infers, that if an operation had been performed early, the life of the patient might have been preserved; to which I beg to add, that if the surgeon had not attempted to fulfil the indication of replacing the gut, it would have been visible and tangible, and have invited the operation; and had he endeavoured merely to squeeze out the contents in the way I proposed, without pushing it back in its tumefied state, and did not succeed in emptying it, the fallacy to which the death must be attributed could not have occurred. The records of practice, and the experience of several surgeons, furnish examples to the same effect; still the latest writers and teachers recommend this very practice, uninstructed by these facts, and merely copying those who went before. The reasoning and facts advanced in this paper, and in my publication, and much observation, perfectly satisfy me, that the indication of cure, and the manner of fulfilling it, as universally taught, are at variance with all principle, not adapted to the cure, highly dangerous, and ought to be abandoned, and the indication substituted of abating inflammation, and removing tubular obstruction, which is often effected by local and general remedies, as I have already detailed, without handling the part; and should they prove ineffectual, the sensibility will be lessened, so as to admit of manual efforts with more safety. These efforts should be conducted differently from the usual manner, their object being different, namely, the return of the contents of the hernia, not the hernia itself. This is to be effected by embracing it with the hand or hands, according to its size, and gently squeezing, so as to act upon the contents, without disturbing the hernia much, or removing it from its situation. If the contents obtain exit through the obstructed part of the intestine, the strangulation will yield; then the intestine, being reduced to a smaller size than the aperture, can be replaced with ease: It is manifestly its bulk that constitutes the resistance; a point of incalculable importance on which to anchor. Should this practice fail, the hernia will be still within the reach of operation, and those fatal consequences arising from strangulation within the ring, after the replacement, can never occur.

Every practitioner lays great stress on the direction which ought

to be given to the pressure; but this cannot be necessary to press out the contents, because a confined fluid will force its way where there is the least resistance, and it is best assisted by the gradual approximation of the sides of the containing tube. Surely when the disease yields to the tobacco glyster, and to cold applications, the contents must have passed without any direction having been given to them, or force of any kind been used. In femoral hernia I cannot too strongly mark the danger of the usual practice, as the inflamed gut must be greatly contused by pressing it against the bone (which surely cannot yield), and against the sharp edge of the tendon. I have heard a professor, in recommending his pupils to use force, state, that the objects of returning the hernia, and of pressing out the contents, may be effected together: But this opinion cannot be supported a moment: because, as it is intended to overcome the resistance which the apertures afford, it should preserve its firmness all through; for, the moment the air is pressed out, it becomes flaccid and totally unfit for the intended purpose: he should desire, on the contrary, that the sides of the intestine be firmly agglutinated, and not a particle of the contents escape, so as to be wielded like a wedge in forcing through these rigid parts. He also observed, that when the operation is performing, it sometimes happens, that in returning the hernia, it pushes out, and there is great difficulty in retaining the part first returned within the cavity. To remedy this, he directs, that, after pushing up a part, the fingers should be placed at the aperture, to keep it in, whilst the other hand was employed in pressing up the remainder. That this view of the case, and the practice, are erroneous, I conceive can be easily shown. The inflated state is not attended to; protrusion is the natural effect of the continuance of that state; the removal, then, of the air, &c. into the part of the gut which is within, by gentle pressure, will render it flaccid; then its pervious state will be ascertained, and it will not protrude until there is time to finish the operation. It is also recommended to draw down part of the gut after the incision of the tendon; in favour of which practice no good reason is advanced, and it is liable to strong objections. It is tumefied and inflamed outside and inside the apertures, and contused at the point of pressure; in this state it is to be stretched and pulled through a tense small opening, resisted within by tumefaction, and all this to assist its return into the abdomen. Now, if a pervious state of the gut and freedom of circulation have taken place, the slightest pressure will reduce the size of the hernia smaller than the opening, and in that state all resistance will be removed, and it can be passed in with the greatest ease.

To conclude, I request I may be understood as opposing the principle, that strangulated hernia is to be cured by pushing

back by force the inflamed and inflated parts through the perforations in the abdomen; as desirous of deciding the question of bleeding *quoad vires*, which is in doubt, and establishing the principle, that inflammation alone is to be combated, with reference to the importance of the parts, and the necessity of its immediate alleviation. In the opinion that the term *strangulated* is not expressive of the real nature of the disease, and encourages the practice which I think erroneous, I would substitute the term *inflamed hernia*. We know, that patients under enteritis have precisely the same feelings and effects as those who labour under inflamed hernia, yet there is no stricture from tendinous compression; in the former the intestines are inflamed, and the distress arises from their being distended with flatus of the most pungent kind in the inflamed state. In inflamed hernia the effect from the apertures is incidental; which is proved by the existence of the disease when they are perfectly free. Dissections show that the cause of death in both diseases is the same; namely, diffused inflammation and its consequences. The surgeon who is impressed with the notion, that he is to cure *inflamed hernia*, will never place his patient on his head, and toss him about; such practice may increase, but cannot abate the tumefication, which is the *sine qua non*; he will not attempt to push it by force through an aperture which bears no proportion to its dimension. No: he will proceed as in all cases of visceral inflammation, enjoin composure, and hold firmly in his view, that until the obstruction in the intestine, which is the effect of inflammation, is removed, its replacement in the original situation will not cure, and ought not to be attempted. He will return the hernia after the inflammatory stage, when it can be done with safety, as curative of hernia but not of strangulation, as it is termed. That the operation has very often terminated fatally, although less frequently than formerly, must be acknowledged. The cause assigned for this termination has generally been, that it was performed too late, to which I assent, in a great measure; but I particularly attribute it to the mistaken view of the disease, and the practice founded upon it. It is represented as if entangled, and to be disengaged by jolting the entire body, and forcing with the points of the fingers and entire hand, &c. &c. which is by no means calculated to remove the contents (although it does so sometimes per accident), and must aggravate the symptoms so as to render future operation unavailing. I consider the jolting as improper as it would be in enteritis. The French surgeons succeed more frequently than we do, which is attributed to operating early: I attribute their success to bleeding, which they practise to great extent, and to their avoiding manual efforts very much. Dessault forbids them altogether; indeed their chief

reliance is on bleeding. The many cases recorded, my own experience and view of the disease, warrant me in believing, that if the hands were not applied, but strict attention paid to composure and position, and bleeding particularly attended to, that the operation would be less frequently necessary, and often successful.

To the attempts which have been made to decry my opinions, I offer these reflections in reply; desirous of defending myself only by further explanation; scorning the example of those Reviewers who degrade an honourable profession by illiberality, and, instead of elucidating science by temperate discussion, obscure it by misquotation, and every kind of misrepresentation; thus disgusting the ingenuous, repressing their zeal, and discouraging their contributions, to the prejudice of humanity.

IV.

Case of Obliteration of the Internal Jugular Vein. By William Lardner, Surgeon, Birmingham.

June 19. 1811, I was desired to visit Mrs S. aged 52, whom I found labouring under cough, difficulty in breathing, great hoarseness, emaciation, debility, and a difficulty in swallowing, which had arisen to such an alarming height, that it was with considerable effort she could get down part of a tea-spoonful of milk at a time.

The history she gave of her complaint was as follows.

The first attack of considerable difficulty in swallowing was about two months before, at which time also she perceived a tumour at the angle of the jaw; the tumour and dysphagia had rapidly increased, and kept pace with each other, and had brought on the emaciation and debility, which seemed to have no other cause, as her desire for food was considerable; and she even felt irritated when she saw others eating, and found she could not partake with them.

About 15 years before, she had an attack of difficulty in swallowing, but in a far less degree than at present. It was much lower in the œsophagus, and attended with sensations altogether different from the present affection. She has for some years been occasionally affected with headach and giddiness.

For six weeks previous to her application to me, she had been attended by a medical man, who had done little more for her than the repeated application of blisters to the tumour.

On examining the tumour, I found it to be about the size of a pigeon's egg, situated behind and a little below the angle of the jaw, the surface smooth and equally hard all over, perfectly moveable, and extending deeply toward the œsophagus.

Finding the patient in this hazardous situation, I requested the opinion of some medical friends, who thought the removal of the tumour, separately considered, might be possible; but if the operation were at all advisable under the circumstances of extreme emaciation and debility, it would be requisite previously to introduce an elastic tube into the œsophagus, through which medicine and a greater supply of nourishment might be injected at pleasure. I therefore endeavoured to introduce an elastic catheter; but, to my disappointment, found the passage too narrow to admit it. With a very small probang I was not more successful; and it was only after several trials that I got a small urethra bougie engaged in the stricture. She swallowed with a little more ease after this attempt, and I hoped to be able to increase this advantage; but, on the 18th, her debility increased. Toward the middle of the day her breathing became more laborious, and in about an hour she expired.

Having obtained permission to examine the throat only, I removed the tongue and fauces, together with the larynx, pharynx, and tumour.

On dissection I found the epiglottis and borders of the *rima glottidis* very much thickened, irregularly ulcerated, and covered with blotches of a circular shape, and light straw-coloured appearance. The sides of the pharynx also exhibited some of these spots. The thickening and ulceration had very much diminished the aperture of the glottis, and rendered it irregular.

About two inches below the *rima glottidis*, the œsophagus was so much thickened as to give the part the feel of a circumscribed tumour. On slitting it up, the internal surface was found to be ulcerated, extremely tender, and covered with a thin discharge of a curdy appearance. The passage was here so much straitened as only to admit the introduction of a probe.

The internal jugular vein had formed a close connexion with the surface of the tumour at the angle of the jaw; and towards the upper part, its structure was lost in that of the tumour: it was consequently *completely impervious*. Previous to slitting up this vessel, I satisfied myself of its impervious state, by introducing a glass tube with a column of quicksilver several inches in height; and a medical friend who was present, as well as myself, was satisfied that none of it passed through the vessel.

On tracing the carotid artery up to its division, the external carotid was of a natural size and appearance, but closely united to

the surface of the tumour. The internal carotid, soon after its separation from the external, plunged deep into the substance of the tumour, and was so much contracted, that I at first thought it also was impervious; but, on examining it by the test of a column of quicksilver, some particles escaped through it. This vessel was very little altered in its size before it arrived at the stricture; but beyond that, it was considerably diminished.

The sympathetic nerve passed close along the back of the tumour, but might be dissected from it without much difficulty.

The eighth pair was situated behind, and a little to the side of the tumour: toward the upper part it formed a firm adhesion with it; and opposite to the obliteration of the jugular vein, dipped a little into its substance.

The tumour internally was firm, of a very light yellow colour, had a slight appearance of cellular structure, and there oozed from it a small quantity of the same kind of curdy discharge as was found in the œsophagus.

The case derives interest from the following circumstances.

1. The obliteration of the internal jugular vein, of which, as far as my knowledge extends, there is no instance on record either naturally or artificially produced.

2. The stricture of the internal carotid, which, indeed, might very properly be called an obliteration, for such it was with regard to any purpose it could serve in the circulation of the brain.

3. The very slight disturbance of the functions of the brain, notwithstanding so great a derangement of its circulating system had taken place.

The consideration of these facts may be an encouragement to attempt, with greater confidence, the removal of tumours thus desperately circumstanced; as if we can (when thus urged by necessity) tie both the common carotid artery and internal jugular vein, with a prospect of success, we may dissect the important nerves that enter into connexion with greater calmness, and free from the obscurity which an effusion of blood produces.

Explanation of the Plate.—*a* The obliterated extremities of the internal jugular vein, which are here lost in the tumour. *b* The internal carotid artery laid open, to show its obliteration at the point of reference. *c* Upper extremity of the external carotid. *d* The internal carotid, much diminished in size. *e* The sympathetic nerve much dissected, and drawn out of its place. *f* The eighth pair, dipping into the tumour at the point of reference. *g* The stricture of the œsophagus laid open. *h Rima glottidis*, much altered by disease. *i* Right carotid artery. *k* Right sympathetic nerve.

Birmingham, 5th August, 1811.

V.

Cases of Variolous Inoculation after Vaccination, with Observations. By James Bryce, Fellow of the Royal College of Surgeons, Edinburgh.

Master James L—, aged ten years, and Miss Susan L—, aged nine years, were both vaccinated by their father Mr L—, surgeon, when about three months old. The former was amongst the first persons Mr L— had vaccinated, and the progress of the affection appeared to him quite satisfactory. Miss Susan was in the country when she was vaccinated; and, from some circumstances, Mr L— did not see her arm from the time of inoculation until the inflammation was over, and the vesicle was dried into a crust. Mrs L—, however, describes the vesicle as having been as large, and the areola as extensive as on the arm of James, to the progress of which, on him, she had attended with much anxiety. The state of health of these children at the time of vaccination, and since that period, was, and has been in general good; and they have since gone through the diseases of chicken-pox, hooping-cough and measles, from the latter of which Miss Susan suffered more severely than any other of Mr L—'s children.

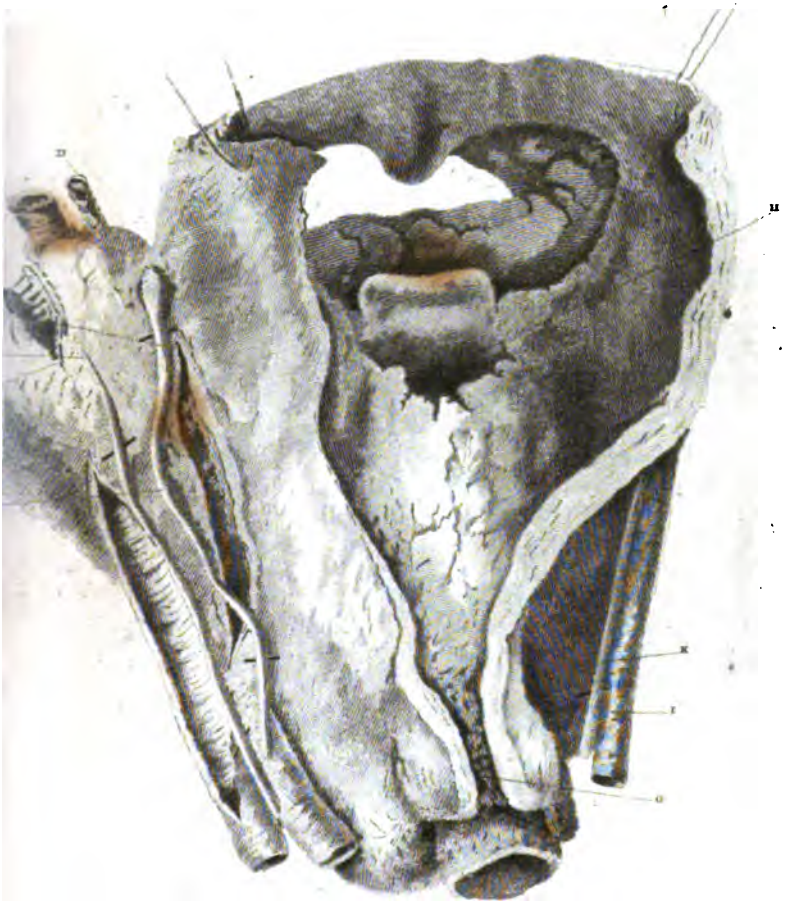
On Friday the 9th of March 1810, both of these children were inoculated, each child by two punctures in the left arm, with recent small-pox matter, taken from a child labouring under natural small-pox, on the eighth day of the eruption. The progress of each of these inoculations was unusually rapid; and on Thursday the 15th, the arms appeared so much inflamed, and the children complained so much of pain in them, that they were kept from school during that day; they complained of headach, sickness, and frequent shiverings, and were evidently very feverish. Pulse 120.

On Friday the 16th, the affection on the arms of both children very much resembled the vesicles of the cow pox on the ninth day: each vesicle had a distinct and hard areola; and there was also an extensive erysipelatous affection, extending nearly from the shoulder to the elbow of each child. The fever in both children was less than yesterday.

Saturday the 17th James was free from fever; the erysipelatous affection on the arm was greatly diminished; the vesicles and areolæ were still fresh; no eruption on the body was observed.

Miss Susan had still some fever; the erysipelatous affection

Mr. Lardner's case of Obliterated Jugular.



E. Mitchell sculp.

of the arm was gone. The vesicles and areolæ were still fresh-looking, and a small pinple was this morning observed on the edge of her under lip, and another about the size of a small pin's head on her back, which merely felt hard on passing the finger over it.

On Sunday the 18th James was quite well. The inflamed areolæ were fading, and the vesicles, which still very much resembled those of the cow-pox, were beginning to dry. James's arm gradually dried up, and no eruption was ever observed on him.

Miss Susan was this day also quite free from fever. The areolæ were fading; the vesicles were still fresh, and, on being punctured, discharged a perfectly limpid fluid. The pimple on the lip was this day increased to the size of an ordinary pin's head, without any surrounding inflammation, and felt quite hard; it was punctured, but I am not certain that any discharge took place; with the lancet used for that purpose, however, two more of Mr L—'s children were puuctured in the arm, viz. George and Elizabeth. Two more pimples were also observed in the course of yesterday on Miss Susan, viz. one on the hairy scalp, and one on the great toe. The pimple on the back was this day much less red, and evidently fading. With virus which had exuded from the vesicles on Miss Susan's arm, two others of Mr L—'s children, viz. Jane and Isabella, were inoculated.

On Monday the 19th, the affection on the arms of James and Susan was much faded. The pimple first observed on Miss Susan's back was gone; the one on the lip was very small, hard, and dried up. That on the head had not increased in size; it merely felt hard, and contained no matter. The one on the toe was fresh-looking, but of a small size. Mr George Bell moistened a lancet from it for inoculation.

On Tuesday the 20th, both arms drying and blackening, no more eruption has appeared; and the whole of the former are now faded and dried up, except the one on the toe, which is still fresh-looking, but very small.

On Wednesday the 21st, the pustule on the toe was much shrivelled and faded.

On Thursday the 22d, the pustule on the toe of Miss Susan was quite flat and dried up, and all the vesicles on the arms formed into crusts.

In the cases of variolous inoculation after vaccination, which I formerly published, it was remarked, that in several instances, the affection produced on the arm very much resembled the appearances produced by inoculation with the virus of cow-pox, with this difference only, that in them the areolæ were not so hard

as in the proper vaccine affection. In the two cases now mentioned, the appearance of the arms was still more characteristic of the vaccine affection; for not only had the vesicles all the appearance of vaccine vesicles, but they were also surrounded with highly inflamed and hard areolæ; and when punctured on the ninth day from inoculation, the contained fluid exuded in a perfectly limpid state. There was, however, some difference in the progress of these vesicles from the proper vaccine affection; for on the seventh day from inoculation, when I first saw them, they resembled vaccine vesicles, &c. of the ninth day.

This similarity to the vaccine affection produced by inoculation with small-pox matter after vaccination, I have also observed in several other cases, particularly in two children of Mrs D— who were vaccinated, and two or three years afterwards were inoculated with variolous virus by Dr Farquharson. In them the affection, both in its progress and appearance, was extremely similar to that of the cow-pox. This change in the appearance of the affection produced by inoculation with small-pox virus after vaccination (when, from some peculiarity of constitution, the affection proceeds to a considerable magnitude), ought equally to be regarded as a mark of a complete and permanent change having been effected on the constitution of the person, as if very slight appearances only had been produced by the inoculation, and must, with every unprejudiced mind, be a strong argument in favour of the powerful and permanent antivariolous influence of vaccination.

It must, however, be allowed, that it appears at first sight unfavourable to the cause of vaccination to learn, that a person who had been vaccinated only nine years ago, should now, on being inoculated with small-pox matter, have a severely inflamed arm, fever for three days, and an eruption of pustules over the body; but on comparing the appearances which took place in the case of Miss Susan L—, with those which are occasionally produced by inoculating with small-pox matter, persons who had already undergone that disease (small-pox), we ought not rashly to draw any conclusions from such a case, unfavourable to the antivariolous character of cow-pox. In the case of Miss Susan L—, the arm certainly inflamed to a great degree, but it had not the character of the affection produced by inoculation with small-pox matter when not preceded by vaccination. Three of the pimples (for having never contained pus, they should not be called pustules), died away on the second and third days, and the only other remaining one on the fourth day from their first appearance. Compare with this case the following cases

of persons who, although they had undergone the small-pox, were still susceptible of being excited by the infection of that disease, when introduced into their bodies by inoculation.

Mr Miles, a medical gentleman, thus narrates his own case to Dr Jenner. In November 1793, I was desired to inoculate a person with the small-pox; I took the variolous matter from a child under the disease in the natural way, who had a large burthen of distinct pustules. The mother of the child being desirous of seeing my method of communicating the disease by inoculation; after having opened a pustule, I introduced the point of my lancet in the usual way on the back part of my own hand, and thought no more of it, until I felt a sensation in the part, which reminded me of the transaction. This happened upon the third day; on the fourth, there were all the appearances common to inoculation, at which I was not at all surprised; nor did I feel myself uneasy upon perceiving the inflammation continue to increase to the sixth and seventh day, accompanied with a very small quantity of fluid; repeated experiments having taught me it might happen so with persons who had undergone the disease, and yet would escape any constitutional affection. But I was not so fortunate; for, on the eighth day, I was seized with all the symptoms of the eruptive fever, but in a much more violent degree than when I was before inoculated, which was about eighteen years previous to this, when I had a considerable number of pustules. I must confess I was now greatly alarmed, although I had been much engaged in the small-pox, having at different times inoculated not less than 2000 persons. I was convinced my present indisposition proceeded from the insertion of the variolous matter, and therefore anxiously looked for an eruption. On the tenth day, I felt a very uneasy sensation of stiffness and heat on each side of my face near my ear, and the fever began to decline; the affection of my face soon terminated in three or four pustules, attended with inflammation, but which did not maturate, and I was presently well.

I remain, dear Sir, &c. Thos. Miles.

Mr Fewster of Thornburgh, a celebrated small-pox inoculator, had the small-pox in his youth, and was exposed to the infection from his own patients with impunity for forty years, yet happening to wound his finger with the point of a lancet charged with variolous matter, the puncture inflamed and suppurated, and he had a considerable number of pustules on his forehead. (*See Ring's answer to Goldson.*) Dr Jenner remarks, that many similar facts have been communicated to him by various corre-

spondents. Dr Willan also mentions, that two medical students, who had previously had the small-pox, were affected in a similar manner, but more severely than Mr Miles, on scratching their hands with the scalpel while they examined the body of a man who had died of the small-pox; and Mr Dunning of Plymouth mentions, that Master Rendell, four years and four months after vaccination, was inoculated with active variolous matter, and had a little eruptive fever, with twelve hard pimples; and that Miss Stewart, inoculated at the same time, *though she had previously undergone the small-pox by inoculation*, was more affected, both by fever and eruption, than Master Rendell. See Willan, page 65.

In each of the cases now mentioned, the constitution still remained susceptible of being excited by variolous infection, when introduced by inoculation, although the persons had undergone the small-pox at a former period, and some of them had been frequently afterwards exposed to the effluvia from small-pox patients with impunity. In Miss Susan L—'s case, a like degree of susceptibility to be affected by the contagion of small-pox, when introduced into the constitution by inoculation, remained after the cow-pox, as in the former cases after small-pox. But, as in the former instance, this susceptibility is very properly referred to some peculiarity of constitution, without affecting the general rule, that persons who have undergone the small-pox by inoculation, may be considered as secure against any future attack of that disease; so, in the case of Miss Susan L—; this slight degree of susceptibility of excitement by small-pox inoculation after vaccination, ought, in justice, to be attributed to the same cause (viz. some peculiarity of constitution), and should in no degree affect the general rule, that those who have undergone vaccination are thereby secured against the attacks of small-pox; for it would surely be unreasonable to expect that a greater degree of security against the small-pox should be imparted to the constitution by the cow-pox, than by the inoculated small-pox itself.

But farther, it will scarcely be denied, that had Mr Miles and Mr Fewster, whose cases are narrated above, and who had often attended small-pox patients with impunity, not been inoculated, they might each have passed through a long life, and been daily exposed to the effluvia of small-pox patients, without suffering from that disease. In like manner, I am convinced, might Miss Susan L— have been fully and freely exposed to the effluvia or natural infection of small-pox without having been infected; and this consideration ought strongly to impress on our minds, the propriety of Dr Willan's caution against the indiscriminate use of variolous inoculation as a test of the correctness of vaccination, or for any other purpose. Page 72.

Two of Mr L—'s children were inoculated with the lancet used for puncturing the pimple on Miss Susan's lip, viz. George, who was vaccinated above six years before, and Elizabeth, who had been vaccinated above five years. Two others of his children were inoculated with limpid virus taken from the arm of Miss Susan, viz. Jane, who was vaccinated above seven years, and Isabella, vaccinated only two years.

On the fourth day from inoculation, all these punctures felt hard on pressing the finger over them, and had every appearance of coming forward. On the sixth day the punctured parts were less fresh-looking on all, except on the arm of Isabella; on her it was more advanced and red, but did not appear to contain any fluid. On the eighth day the affection on Isabella's arm was beginning to fade, and on the arms of the other three it had almost entirely disappeared. The inoculation of these last four children leads to two conclusions, either of which is sufficiently favourable to the antivariolous character of cow-pox, viz. 1st, Either that the virus regenerated on Miss Susan L— was not variolous virus; or, 2dly, That the constitutions of these four children who were inoculated with it were rendered unsusceptible of variolous action by the previous vaccination. It is also worthy of remark, that of these four children inoculated from Miss Susan L—, the affection proceeded to a greater length on the arm of the youngest, who had been only two years vaccinated, than on any of the others, although one had been five, another six, and the third seven years vaccinated.

Since the occurrence of the above cases, I have had an opportunity of seeing a great many children who have been inoculated with variolous matter after vaccination. In general, the affection which was produced, began to fade about the fifth or sixth day; if it advanced beyond that period, it assumed the appearance of the vaccine affection; but in no instance have I observed any constitutional excitement, although some of these children had been upwards of ten years vaccinated, nor was the affection observed to be more severe in those who were longer, than in those who were more recently vaccinated.

I was lately informed of a circumstance respecting small-pox inoculation in the family of Sir J— H—, which, together with many other well authenticated similar instances on record, should keep our minds easy, and make us hesitate to doubt the antivariolous powers of cow-pox, even although the small-pox should occur in some cases after the vaccine affection on the arm had appeared to run through the regular course. Two daughters of Sir J— H— were inoculated at the same time with small-pox, about 17 years ago; a pustule, with the usual degree of inflam-

mation, was produced on the arm of each. At the usual time, one of them had fever, and an eruption of about 50 pustules on the body. The other had no fever, nor eruption on the body; but the appearance of the arm was such, that the medical attendant assured the parents he was satisfied the child was safe from any future attack of small-pox; the inflammation gradually went off, the pustule blackened and dried up, and the child appeared quite well. Nine days, however, after the pustules on the body of her sister had suppurated, she became feverish, and had a numerous eruption of small-pox over her body, evidently caught by natural infection from her sister. Now, it certainly cannot be doubted, that the action of the small-pox virus introduced by inoculation was, in this case, merely local; and although a pustule, with the usual degree of surrounding inflammation was produced, yet that the constitution remained unaffected, and consequently left the person still liable to the small-pox. A similar case has been reported to me to have lately occurred at Musselburgh; and many other well authenticated instances are on record, in which a distinct pustule, with surrounding inflammation, excited by inoculation with small-pox matter, had failed to protect the constitution from a future attack of that disease—that is, had been a mere local affection.

Now, as this is well ascertained to be occasionally the case with small-pox inoculation, why should it not also be allowed to occur occasionally in cow-pox inoculation, without raising the hue and cry against the efficacy of vaccination? Surely it cannot be reasonably expected, as has already been remarked, that inoculation with the cow-pox virus, is more certainly to give security against the small-pox, than inoculation with the virus of small-pox itself? And it ought to be remembered, that the absence of eruption, and in most cases even of fever, in the vaccine process, renders it more difficult for practitioners to ascertain, according to the general mode of conducting vaccination, whether the affection be constitutional or only local, than it is to ascertain the same circumstances from small pox inoculation. It was to obviate the deception which might occur in cases of this kind, that I proposed the practice of the double inoculation, or test of a constitutional affection in cow-pox; and unless this mode of conducting vaccination, or some other equally effectual in distinguishing a local from a constitutional affection, be generally practised, I am convinced that every practitioner must be occasionally deceived concerning the security of his patient against an attack of small-pox. Such instances may indeed be rare with experienced and attentive practitioners; but still it would be unreasonable to expect that *even with them, they should not* occur

in cow-pox occasionally, as well as in small-pox, and from the different circumstances attending the progress of the two affections, perhaps in a much greater proportion in the former, than in the latter kind of inoculation.

(To be continued.)

VI.

Observations on Tropical Nyctalopia. By JOHN FORBES, Surgeon, Royal Navy.

"Suntque oculis tenebræ per tantum lumen obortæ."
OVID. Met. Lib. II. l. 182.

I FIND it observed by different authors, that nyctalopia, or night-blindness, by some called hemeralopia, is, in tropical countries, endemic; but my confined reading has not furnished me with any account of it as it occurs in these climates. On this account, and because it appears, in some respects, to vary from the disease as occurring in Europe, I have thought it might not be improper to throw together the few observations which my limited experience has enabled me to make on this complaint. This, if of no other advantage, may have the effect of inducing others, who have had much more extensive experience in this disease, to communicate to the public the result of their observations.

Nyctalopia, I believe, prevails in all tropical countries. In the Mediterranean, also, it is of frequent occurrence. In the West Indies it is very common among our seamen; and it is only as it obtains among them, and in that part of the intra-tropical zone, that I have observed it. I have known it to exist in a proportion greater than one in twenty; and have been informed by surgeons and other officers on that station, that they have seen it prevailing in ships to a much greater extent. Notwithstanding this degree of frequency, however, my experience has been very confined: so much so, indeed, that, were it not for the causes already mentioned, and from the circumstance that any further observation on my part is for the present precluded, I should not have ventured to lay this partial view before the reader. And therefore, that the general results I am to state may not claim an importance to which they are not entitled, I shall mention the

small number of facts from which they are deduced.——Four patients only have I examined, who actually laboured under this affection, and whose cases I had an opportunity of observing during a considerable length of time; into the cases of six others, who had recently recovered from this complaint, I have particularly inquired; several more I have known who had had this disease, which, in their cases, from a transient examination, appeared to accord with those I had seen and particularly attended to. These latter cases of men who had recovered from this disease, are nearly of equal importance with the former, as, in all, we derive the greater part of our information from the patient's narrative. And, to obviate an objection, which possibly may be made to all these cases, I shall observe, that, being aware of the aptitude of this disease for the purpose of the *skulker*, I took particular care that its existence, in every case, should be established (as far as this could be done), by other criteria than the assertions of the patient.

The subjects of this affection varied in their ages (from 20 to 50), temperaments, habits, &c.: in one local peculiarity they all agreed, viz. in having an iris of a *very light colour*; either a light grey, or a light blue.

The time of attack, after arrival between the tropics, was various; but in none less than four months.

The night-blindness, on its first invasion, in some was complete, in others partial, gradually proceeding to its acmé.

Different causes were assigned; such as, sleeping exposed to the brilliancy of the moonlight—the vivid reflection of the sun's rays from the sandy shores,* &c.; but these causes were all (to the patients) hypothetical, no one adducing any particular fact in support of his opinion, or establishing any connexion between the operation of these agents and the appearance of his disease.

In no case did ill health, or any perceptible change in the system, precede, accompany, or follow this disease; † nor was it attended by any external alteration in the eye itself.

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* To this sailors are seldom exposed. Often have our soldiers, however, experienced the power of this cause, in those climes, where

> ——————" les sables infertiles,
> Tristes, secs, et du jour reflétchissant les feux,
> Importunoient les pieds, et fatiguoient les yeux."
>
> DELILLE.

† See London Medical Transactions, Medical Inquiries, Scarpa on the Eye, &c. for cases of European nyctalopia much less simple. Some authors have considered nyctalopia as a symptom or precursor of scurvy.

In by far the greater number of cases, the blindness at night was total; in a few partial; but in all considerable. In daylight, and in a strong artificial light, the sight was perfect, and, with the exception of a single case, in moonlight very imperfect. In its diurnal appearance and disappearance, the nyctalopia depended upon, or was synchronous with, the setting and rising of the sun.

Its duration varied from one night to nine months; its more general period of continuance being from two to three months. In every case but one, it had recurred once, twice or thrice; the different attacks varying only in duration.

In the greater number of cases it terminated suddenly, in some gradually: in two cases its disappearance was followed by epiphora.

Different applications for the cure of this disease were used by the patients; such as the juice of limes (the citric acid) squirted into the eye; part of a bullock's liver, in form of poultice, applied over the eyelids; water; urine. None of these seemed to produce any effect on the disease, except in one case. One man washed his eyes with his own urine, and the blindness did not recur on the night following this first lavation, nor afterwards. In another case, after having been present many months, the disease disappeared shortly after the bursting of an abscess in the ear, the consequence of a preceding catarrh.

The writer of this article never attempted the cure of nyctalopia; nor saw it scientifically treated.

The cause and physiology of the disease we have been describing are, perhaps, sufficiently obvious. The circumstance of its being found chiefly "sub curru nimium propinque solis," and its topical nature, may possibly point out both. But as our few facts, however they may support the conclusions which have been drawn from them, (conclusions which are to be considered, not as constituting the laws of nyctalopia, but as exhibiting the generalized history of a few cases), would ill justify much reasoning on this subject: this discussion, as also the pointing out the best method of cure, will, with more propriety, be left to those who have had much experience in the disease.

VII.

An Essay upon Cinchonin, and its influence upon the Virtue of Peruvian Bark, and other Barks. By BERNARDINUS ANTHONY GOMES. *

I. *History of the Knowledge hitherto obtained of Cinchonin.*

CINCHONIN is a new vegetable principle, discovered for the first time in the bark of the officinal species of the genus cinchona, from which it derives its name. We are in some measure indebted to Dr Maton for its discovery, as he was the first who remarked that the solutions of Peruvian bark gave a precipitate with tannin. At a later period, Mr Seguin, having found out the chemical character of tannin, which consists in giving a peculiar precipitate with gelatin, inferred, from the experiment of Dr Maton, that there was gelatin contained in Peruvian bark; but he was deceived in this inference, as Dr Duncan junior clearly pointed out. (Nicholson's Journal, Vol. VI. p. 225.) And in fact, a very easy experiment clearly proves that the precipitate of the solutions of Peruvian bark, produced by tannin, is owing to a principle not only different from gelatin, but from all others hitherto known.

Take some tincture of Peruvian bark, mix with it a sufficient quantity of water, and after a little time strain; to the strained liquor add the infusion of galls, a precipitate will be produced, which is totally soluble in alcohol.

This experiment shows that the principle of Peruvian bark, which is precipitated by infusion of galls or tannin, differs very much from gelatin and starch; for the precipitate which these two principles give with that reagent are insoluble in alcohol.

It would appear that Dr Duncan, though he made the remarkable discovery of cinchonin, never obtained it completely separated from the other principles of Peruvian bark, as he not only does not indicate the manner of obtaining it pure, either in his letter to Mr Nicholson, in which he gives an account of his discovery, in the Annals of Medicine for the years 1803-4, wherein he wrote upon the same subject, or in the third edition of the

* Translated from the Third Volume of the Memoirs of the Royal Academy of Sciences at Lisbon.

Edinburgh New Dispensatory; but moreover, when, in this last work, he mentions the properties of cinchonin, he says that it is "not acrid, soluble in alcohol and in water, precipitated by infusion of galls—precipitate soluble in alcohol." Now, the first of these properties, the not being acrid, being negative, shows he did not obtain it pure; otherwise, by tasting it, we should have, instead of this negative property, a positive one. For the same reason, he attributes to it solubility in water, which, it seems to me, it does not possess, but by the agency of another principle.

The political state of Europe has not permitted me to see the memoir, in which M. Vauquelin gives the account of his experiments upon the different kinds of cinchona or barks; but judging by the extract, which is inserted in the Medical and Surgical Review, Vol. XV. p. xii. I am led to think this very dexterous and celebrated chemist never was able to obtain cinchonin free from other substances; for he ascribes to it properties which, according to my experiments, do not belong to it. "The principle which precipitates the infusion of oak bark and of galls," says Mr Vauquelin, (*ibid.* p. xiii.) "is of a brown colour, bitter, and less soluble in water than in alcohol, and precipitates emetic tartar, but not glue." In the subsequent pages it will be shown, that these properties do not belong to pure cinchonin, but to its union with other vegetable principles.

It is not without some diffidence, that I venture to differ from Dr Duncan, and M. Vauquelin, in what concerns their labours and opinions. However, I shall state, with candour and frankness, what I have found and judged different from what they thought.

But before going farther, I must own, that if in what I am about to detail, I have at all advanced our knowledge of cinchonin, it is owing to the concise account of this principle which Dr Duncan gave, and, as I mentioned above, principally to that of its chemical character consisting in giving, with the infusion of galls, a precipitate soluble in alcohol; which chemical character was certainly my chief guide in the investigation of its properties.

II.—*Of the manner of Extracting Cinchonin.*

Having remarked that the tincture of cinchona, when not previously precipitated by water, gives, on being mixed with infusion of galls, a precipitate which is not completely dissolved by alcohol; and having observed, moreover, that the precipitate of the tincture of cinchona by water is dissolved by potassa, I concluded that this precipitate was not resin, and that it might be

extractive, which has the property of losing its solubility in proportion as it becomes more oxygenated, and that of being soluble in water by means of potassa, even when it is oxygenated. Having remarked also, that potassa formed, in the aqueous solution of the alcoholic extract of cinchona, a white precipitate, which was redissolved by alcohol, and showed other properties of cinchonin, I concluded that it might be obtained by oxygenating, and rendering insoluble the greatest part of the extractive of the cinchona, which accompanies it in the tincture, or alcoholic solution, separating by means of water what was or becomes insoluble, then oxygenating the residuum, and separating it afterwards from the cinchonin by potassa. I do not pretend to defend the accuracy of this theory; I intend only to indicate what suggested to me the following process to obtain cinchonin.

Take tincture of Peruvian bark; let it evaporate to the consistency of an extract; mix with it, by means of a glass rod, various and successive portions of distilled water, and strain them successively until the water pass almost colourless and insipid. Evaporate the whole of the filtered liquors till the extract be obtained; add to this, successive portions of a well saturated solution of potassa, and strain successively through the same filter until the lixivium pass colourless, or the residuum become white; wash the residuum in the same filter with a small portion of cold water, and let it dry.

By this process there remains on the filter a substance which is white when in a state of greater purity, and pale or reddish when less so. When white it is powdery, and is easily detached from the filter. It is also bitter, inflammable, very little soluble in water; but soluble enough, when recently prepared, in sulphuric ether, alcohol; in diluted sulphuric, nitric, and muriatic acids; in the acetic, oxalic, citric, *malic*; but not in the *tartaric* acid. * From these solutions, which are made without effervescence, it is precipitated by the infusion of galls; and the precipitate is white and capable of being redissolved by alcohol. This substance is of course the cinchonin of Dr Duncan; but even when white, it is not sufficiently pure; for it remains always more or less contaminated with colouring matter, with the small threads of the filter, and, even after being washed, with some potassa.

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* I doubt of its solubility in malic acid, and of its insolubility in tartaric acid; for I suspect the purity of the acids I employed.

III.—*Process to Purify Cinchonin.*

Impure cinchonin (§ II.) is dissolved in the best alcohol, then it is strained, and to this solution an equal quantity of distilled water is added; the mixture is left in a glass loosely covered with paper, until the odour of alcohol be not perceived; it is then strained, and the residuum left to dry on the filter, forming very fine, small, and white filiform crystals.

IV.—*Varieties observed in this Purification.*

The result of the preceding process varies somewhat according to the quality of the bark from which the cinchonin has been extracted. When the alcoholic solution (§ III.) is of the cinchonin of the red bark, or other Peruvian barks, not of the thick kinds; on the addition of the water, there results a transparent mixture,—and it is only after standing some time that the filiform crystals begin to float in the liquor, and to precipitate and increase in number and size as the alcohol evaporates; and at the same time tuberculous incrustations are formed on the sides of the vessel, of a crystalline appearance when humid, but opaque, more or less coloured, and without brilliancy when dry.

If the alcoholic solution (§ III.) is of the cinchonin of the thick barks *(calissayas)* of Lima and of Sante Fé, immediately upon the addition of the water the liquor becomes opaque and milky, and a resinous reddish substance, in form of drops of oil, but concrete, is observed to swim on the surface of the liquor instead of crystals, and the sides of the vessel are covered with incrustations, as in the preceding case.

In fine, when the alcoholic solution (§ III.) is of the cinchonin of the bark called *huanuco*, which is distinguished more or less by tubercles or protuberances on the external surface, not only there appear many crystals of a silver brightness, but the incrustations are in a great manner composed of the same crystals, and very white and silver-like.

V.—*Examination of the filiform Crystals.*

1. These very fine and minute filiform crystals, rubbed between the fingers, are converted into a white and very subtle powder, resinous to the touch, as if we were rubbing between the fingers powder of colophony.

2. They are insipid and inodorous, but they seem to dissolve in the saliva.

3. Exposed to the flame of a candle by means of a glass rod, they decrease in volume, exhale smoke with a peculiar odour,

not disagreeable, melt, taking a chesnut colour, and burn with a clear and white flame.

4. They are insoluble in water either cold or warm; for water agitated with them and strained, does not give any precipitate with the infusion of galls.

5. Mixed with the cold aqueous infusion of *cinchona pubescens* of Brazil (which does not give any precipitate with the infusion of galls, but becomes turbid with the solution of glue, and dark greenish-brown with the solution of sulphate of iron), it forms a turbid and gelatinous liquor, which, when strained, gives, with the infusion of galls, a precipitate redissoluble by alcohol.

6. They are soluble in alcohol, sulphuric ether, in the diluted sulphuric, nitric, and muriatic acids, in the acetic, oxalic, citric, in the gallic, (§ V. 5.) in the malic? not in the tartaric?

7. The acid solutions give a white precipitate with the infusion of galls, which is completely redissolved by alcohol. If to the same solutions we add any of the three alkalis, a precipitate is formed in white flakes, which is redissolved by alcohol.

8. The solution in sulphuric acid is speedy, complete, and without effervescence. The precipitate, which the solution of potassa forms in this, is as white as lime, insipid, inflammable like the crystals, is dissolved slowly, but completely, in alcohol, from which it is precipitated by water in smaller crystals, but very similar to the primitive ones.

9. Lime-water does not seem to precipitate the solution of the crystals in muriatic acid, even though it be added in excess. This mixture gives, with the infusion of galls, a precipitate which is only dissolved in part by alcohol.

10. From these properties it seems to me, that the following conclusions may be deduced: 1*mo*, That the crystals are a pure vegetable principle. This appears from the regular and crystalline form which they assume, from their complete solubility in sulphuric acid, and from the precipitate which potassa forms in this solution, having the same properties as the crystals, (§ V. 8.) 2*do*, That this pure principle is the cinchonin of Dr Duncan, since it gives, with the infusion of galls, a white precipitate capable of being dissolved by alcohol, (§ V. 7.) 3*tio*, That this principle, in its insolubility in water, its inflammability and solubility in alcohol and ether, bears some analogy to resin, but differs from it by its crystallization and solubility in the acids, (§ V. 6.) 4*to*, That by these last properties it is somewhat analogous to camphor, from which it differs, however, in being without odour (§ V. 2.); in being precipitated crystallized from the alcoholic solution (§ III. and V. 8.); in having greater specific gravity, since it sinks in water (§ IV.); in giving a precipitate with the

infusion of galls, &c. *5to*, That, by having singular and peculiar properties, it is, as Dr Duncan thought, a vegetable principle different from all others hitherto known.

VI.—*Examination of the Incrustations.*

1. These are in form of small protuberances; white while humid; opaque, commonly red, and without any brilliancy when dry; they seem resinous when they are masticated, and of a pungent and bitter flavour.

2. Exposed to the flame of a candle they melt, and burn better than the crystals, with a clear and white flame.

3. They are sparingly soluble in cold water; for when agitated with them, and strained, it gives a white precipitate with the infusion of galls.

4. They are not totally dissolved in the mineral and vegetable acids, in which the crystals are complutely soluble (§ V. 6.) and they are also precipitated from these solutions by the infusion of galls.

5. A solution in diluted sulphuric acid, after being strained, is transparent, and gives a white precipitate with potassa, but not so clear as that of the crystals.

6. This precipitate (§ V.) is bitter, and burns with the same odour and residuum as the filiform crystals; it is not completely dissolved by alcohol, leaving a reddish residuum. This alcoholic solution does not give a precipitate with eight times its quantity of water, and thus diluted it gives a precipitate with the infusion of galls, which is redissolved by alcohol; it does not give a precipitate with the solution of emetic tartar, and does not change the colour of paper tinged with turnsol, or with the flowers of mallows.

7. From these properties, it seems to me, that it may be inferred, 1*mo*, That these incrustations contain cinchonin, or the substance of the filiform crystals, (§ V.); for they give, with the infusion of galls, a precipitate, which is redissolved by alcohol, (§ VI. 4. and 6.) 2*do*, That they differ from the crystals in being in the form of protuberances, and in having colour and taste (§ VI. 1.), in burning better (§ VI. 2.), in being sparingly soluble in water (ib. 3.), in being not completely soluble in the acids (ib. 4), in giving a less clear precipitate (ib. 5.), bitter, not completely soluble in alcohol, and the residuum being of a reddish colour (ib. § VI. 6.) Lastly, in this alcoholic solution not being precipitated by eight times its quantity of water, (ib.) It contains, besides cinchonin, a substance which imparts to it colour, flavour, and solubility in water, which is not very soluble in alcohol, or in the acids, in which, however, it is sparingly dissolved, and is preci-

pitated with the cinchonin; in fine, which impedes its crystallization, leaving to it scarcely a mark of this property, when in the form of small protuberances. 3*tio*, That the incrustations have neither a free acid nor alkaline base, (§ VI. 6.) 4*to*, That cinchonin, at least in this combination, does not precipitate the solution of emetic tartar, (ib.)

VII.—*Of the Liquor which remains after the Crystallization and Incrustation.*

This liquor being strained and left to evaporate spontaneously, in the course of some days assumes a gelatinous appearance, but it never assumes the form of a jelly; it has a bitter taste, and at last emits the smell of orange and cinnamon-flowers.

This liquor changes paper tinged with flowers of mallow to a green colour; it gives, with the infusion of galls, the same precipitate with the crystals and incrustations, and it effervesces with sulphuric acid.

These phenomena show, that this liquor contains carbonate of potassa, cinchonin, and the principle which communicates bitterness to the incrustations, and makes them sparingly soluble in water.

Whence does the pleasant smell of orange and cinnamon-flowers proceed, which is only perceived after a long evaporation?

VIII.—*Of the combination in which Cinchonin is found in various Vegetables.*

Cinchonin is not a principle peculiar to cinchona, as its name indicates, which therefore is not well appropriated. According to Dr Duncan, it is also found in angustura, columba, ipecacuanha, black-pepper, Guinea pepper, and in opium. I found it in the red bark; in that of *huanuco;* in the coarse barks of Lima and Sante Fé; in a kind of bark brought from Brazils, which is similar to, if not identical with that of Lima; in the barks of *Portlandia hexandria;* in a light, thin, and smooth bark (of which I shall speak in another publication relating to cinchonas), which was brought from the province of *Goiazes*, with the improper name of cinchona, and which seems to me identical with another bark given to me in Brazil, and which I was told was brought from *Minas Geraes*, and was there known under the name of bark of the land-orange tree; lastly, in a coarse bark, red within, and heavy, which I shall describe at the same time with Goiazes bark, which was brought from the village of *Camamu* through Bahia, with the name, equally improper, of cinchona. But I did not find cinchonin in two kinds of cinchona discovered in the

province of Rio de Janeiro, and which are, according to Dr Vicent Gomes of that city, and our celebrated botanist, Dr Brotero, the barks of the *cinchona pubescens*, and of the *cinchona macrocarpa*. This circumstance farther shows the impropriety of the name *cinchonin*, which it is yet convenient to preserve, in order to avoid confusion.

Of the barks above mentioned, all those which I examined and which contained cinchonin, yielded this principle to water as well as to alcohol and wine. Hence perhaps Dr Duncan and M. Vauquelin concluded that it was soluble in water and in alcohol; but being certainly, as I have said (§ V. 4.), when pure, by itself insoluble in water, the conclusion is, that it exists in those barks combined with another principle which makes it soluble in water, as we observe in § VI. 3. 6. There are many reasons to suspect this solvent to be an acid in the true cinchonas; for besides cinchonin being soluble in various acids, and there being in all the cinchonas marks of acidity, it is by potassa that it is precipitated in the process of extraction, (§ II.) It is even probable that this acid is the gallic; for on examining the precipitate with potassa, a substance is found which gives a brown colour to the solution of sulphate of iron.

But if the gallic acid be the solvent of the cinchonin in the cinchonas, it is not so in all the other barks which contain it; for the aqueous solutions of the alcoholic extracts of the barks of Goiazes and of Camamu, not only do not redden the tincture of turnsol, but on the contrary they make it green, and the cinchonin of these barks, and of the Portlandia hexandria, is not precipitated by potassa as that of the cinchonas, (§ II.)

Besides this difference in the solvent of cinchonin, I believe there is yet another. The solvent of cinchonin in the cinchonas loses by oxygenation, or by the action of the air, more and more of its solubility, not only in water, but also in alcohol. This observation leads me to think, that it partakes a great deal of, or bears a great analogy to, the extractive of M. Fourcroy. It does not seem then improbable, that it may be in different states of oxygenation in different barks, and that by being perhaps more oxygenated in the coarse ones or *calissayas*, and by being found in some of them mixed with resin, it happens, that in the purification of the cinchonin of these barks, a milky precipitate is formed without obtaining crystals, (§ IV.) It may also happen, that the solvent of the cinchonin in the barks of Portlandia, Goiazes, and Camamu, is less oxygenated, or less capable of oxygenation, than that of the cinchonas. This conjecture becomes probable, on observing that the tinctures of the barks of Goiazes and Portlandia scarcely become turbid with water; and that of Camamu

bark, though becoming so, gives a less precipitate than the tincture of cinchona. On the other hand; the potassa which precipitates the cinchonin in the recent aqueous extracts of the alcoholic extracts of the cinchonas, does not give any precipitate with the recent aqueous extracts of the alcoholic extracts of Camamu bark, but it gives some with the old extracts of this bark, and none at all with the extracts, either recent or old, of the barks of Goiazes and Portlandia.

But we shall quit this subject for the present, till new experiments enable us to proceed from probability to chemical demonstration. In the mean time, I beg leave to reason, from the data I now possess, though they are not all those which are requisite, upon an important problem in medical practice.

IX.—*Of the Influence of Cinchonin upon the Virtues of Vegetables.*

It is well known that M. Seguin, supposing the cinchonin of cinchona to be gelatin, considered that the febrifuge principle, as he called it, was the supposed gelatin of this bark; and in his illusion, he attempted to substitute animal gelatin in place of cinchona. Not having seen the memoir of M. Seguin on the febrifuge principle of cinchona, but only an extract from it (Medical and Physical Journal, Vol. XI. p. 215), I do not know the facts he had to form and support his opinion, but I believe that it is not altogether destitute of foundation; for when I was attending the military and naval hospitals, I received orders from the offices of the respective secretaries of state, to try different barks unknown in European medicine, which had been brought from Brazils under the name of cinchona. At that time I had not yet tried any chemical experiment with respect to cinchonin, and it was quite unknown to me whether the barks of Brazil contained it or not. Thus, without any previous knowledge, I tried successively these barks in fevers, particularly in those of the intermittent type, and I found that the barks of Camamu, Goiazes, Portlandia hexandria, one kind of cinchona of the Brazils, and different cinchonas of the Spanish America, were remarkably febrifuge. At the same time, I remarked with regret and astonishment, that two true species of cinchona, brought also from Brazils, possessed nothing, or almost nothing, of that quality.

Reflecting upon this result of clinical observations, it occurred to me, that a comparative chemical analysis might explain that remarkable difference, and even indicate the principle which renders the good Peruvian bark eminently febrifuge, it appearing to me very probable, that all the barks which were remarkably antifebrile, might have a principle or common circumstance, which ought to be entirely or almost wanting in the barks which were not febrifuge.

To observe how far the truth of this conjecture could be extended, I began to try chemical experiments upon all the Spanish cinchonas, and the three cinchonas and other three barks of Brazils above mentioned; and I found that all the Spanish cinchonas of our shops, one of those of the Brazils, which I had observed, was febrifuge, and the barks of Goiazes, Camamu, and Portlandia, contained cinchonin; and that this principle was not to be found in the other two cinchonas from Rio Janeiro, that is, in the barks of the *cinchona macrocarpa*, and of the *cinchona pubescens*, which possessed very little or nothing of the febrifuge quality.

Hence, from all these cinchonas, and also three other barks, which contain cinchonin, being febrifuge, and from two true species of cinchona, which do not contain it, having very little or no pretensions to that title, I am inclined to conclude that cinchonin is the principle which renders cinchona, and the other vegetable substances containing it, eminently febrifuge.

This conclusion, however, seems to be contradicted by what M. Vauquelin says (Med. and Chir. Review, Vol. XV. p. xiii.) "As the property of precipitating tannin is not common to all the cinchonas, they therefore do not exclusively derive from that their febrifuge power, for there are many which do not precipitate tannin, and yet we know that they cure fevers."

This quotation seems to indicate that the cinchonas which contain cinchonin, and those which do not contain it, are equally febrifuge; but the case is so far from being so, according to M. Vauquelin himself, that he says, in another place, "It even seems, that the principle which precipitates the infusion of oak bark and galls is febrifuge; for it is in general well known in medicine, that those species of cinchona which produce this effect are the best."

Thus the observations of the illustrious French chemist, far from contradicting, confirm my conclusion with respect to cinchonin, to which I ascribe only the febrifuge preeminence of cinchona, and not exclusively the febrifuge power; for it is universally known, that before the discovery of cinchona, and even after it, fevers were cured with bitters and compositions without cinchona. But from general practical observation, every person reckons these febrifuges so inferior to good cinchona, that in dangerous intermittents, they have recourse to it in preference to any other.

But as cinchonin is insipid, inodorous, and always found in vegetables in combination with other principles, which render it bitter, soluble in water, &c. it becomes a question whether it

be febrifuge by itself, or only an essential part of the febrifuge principle.

If it is a well known fact, as Dr Duncan affirms, that angustura, which, according to him, contains cinchonin, does not cure intermittent fevers, (New Dispensatory, p. 157), we ought to conclude, that cinchonin is merely an essential part of the febrifuge principle of vegetables. This conclusion derives great probability from the practical observation, that, in general, cinchona, given in powder, acts more powerfully than any of the preparations of this bark, and from the medical qualities of ipecacuanha, opium, &c. which contain also cinchonin (§ VIII.), being different.

But what is merely probable is not demonstrated; and in matters of such importance, probabilities do not suffice—evidence is necessary. It is then of importance to determine, by decisive clinical experiments, what is the combination, either natural or artificial, that renders cinchonin eminently febrifuge, or whether, in spite of its insipidity and insolubility in water, it be febrifuge by itself, as is possiblythe case; for the tartrate of potassa and antimony, and the antimonial powders, &c. are insipid, and yet stimulate the stomach in a remarkable manner. Besides, although it is insoluble in water, it does not seem to be so in saliva, and in the acids of the stomach, &c.

I shall, in the mean time observe, with regard to this, that the infusion of some of the cinchonas, which contain cinchonin, precipitates the solution of glue, and turns blackish the solution of sulphate of iron; that the infusion of the red cinchona, and that of the bark of Goiazes, produce with this last reagent the same effect, but do not precipitate the solution of glue; lastly, that the infusion of the bark of Camamu, neither changes the colour of the solution of sulphate of iron, nor does it precipitate glue. From this I must infer, that the extract or solvent of the cinchonin, in some of the cinchonas, contains gallic acid and tannin; that the red bark and that of Goiazes contain gallic acid but no tannin; that of the bark of Camamu contains neither gallic acid nor tannin; and as all these barks are excellent febrifuges (§ IX. 2.), it follows that the febrifuge principle, or essential part of the febrifuge principle of vegetables, neither exists in the gallic acid, which is to be found in all of them except in that of Camamu, nor in the tannin which exists in some of the cinchonas in very small quantity, as was shown by Dr Maton, and the celebrated Davy, and which does not exist at all in the red cinchona, or in the barks of Goiazes and of Camamu; consequently, Mr Wilkinson, M. Fourcroy, and Dr Westring of Sweden, have not sufficient reason to ascribe to tannin the prerogative of being febrifuge.

Hence it is only the cinchonin which can now be recognised as the principle that renders cinchona eminently febrifuge; and as it is not contained in all the species of cinchona, it is of advantage, in choosing this drug, to attend not only to the sensible qualities, but also to examine if it contains cinchonin, which is very easily done, either by the experiment of the first section, or by mixing the aqueous infusion of the cinchona, which is to be examined with another infusion of galls. If the result of this mixture is a white precipitate, there is cinchonin, and so much the more abundant as the precipitate is more speedy or more copious.

VIII.

Report presented to the Royal College of Physicians of Edinburgh, by ANDREW DUNCAN sen., M. D. and P., *respecting the contagious Epidemic Diseases which have prevailed in that City and its Neighbourhood during the Year* 1810; *with an Account of the Number of Burials in the different Churchyards of Edinburgh and its Environs.*

ABOUT eighty years ago, the late Dr Alexander Monro, to whom not only the city of Edinburgh, but the British nation, stands indebted for many important services, published repeatedly, in the Edinburgh Medical Essays, an account of the diseases and deaths which had taken place in this city. Being fully persuaded that the revival of this plan would be attended with some advantages, it appeared to me to be a subject not unworthy of the attention of the Royal College of Physicians. To give a beginning to such a plan, and to point out its utility in some particulars, I made a voluntary offer, of presenting to the College a report on these subjects for the year 1810.

That I might form an accurate judgment of the prevailing epidemics, not merely from my own practice, but also from the observations of others, I sent a circular printed letter to every respectable practitioner in Edinburgh, requesting to be favoured with that information which his own experience afforded. It is indeed true, several, even among those who are generally supposed to be in extensive practice, have not favoured me with any reply. But

from many of the most respectable members, both of the College of Physicians and Surgeons, I have received such satisfactory answers as will, I trust, enable me to give a just account of the contagious epidemics which have principally prevailed in Edinburgh during the year 1810.

All the practitioners, who have favoured me with a return to my inquiries, agree in stating, that, during the year 1810, three contagious epidemics have chiefly been observed in Edinburgh, viz. Cynanche parotidea, pertussis, and scarlatina anginosa.

About the beginning of the year, the most remarkable epidemic which I either saw in my own practice, or heard of from others, was the cynanche parotidea of Dr Cullen; a disease which, I need hardly observe, is generally known in England by the name of *mumps*, and in this part of Britain by that of the *branks*. That this disease arises only from a peculiar and specific contagion, as well as variola or rubeola, can, I think, admit of no doubt. This was clearly demonstrated during the present epidemic. For, after it was introduced into some schools, it affected almost all the children attending them. Of the contagious nature of this disease, I had a remarkable instance in my own family. Four of my grandchildren attended a school, among the children at which it was very frequent about the beginning of February. All the four were subjected to it before the end of February. And a fifth grandchild, who was not at any school, but who slept in the same nursery with a sister and brother, caught the disease in the beginning of March.

The cynanche parotidea, during the year 1810, has been more general, and at the same time more mild, than I have observed on any former occasion. I have never, during this epidemic, observed any instance of the swelling of the glands about the neck being either accompanied or followed by swelling of the testis; a symptom which has been pointed out by many practical writers, and which I have repeatedly observed on former occasions.

During the present epidemic, as far as my observation goes, the disease has been entirely confined to children. I have not myself seen one adult subjected to it. Nor have I heard of an adult under the care of any other practitioner, who has been subjected to it during the present epidemic. This circumstance of the cynanche parotidea being almost confined to infants, is somewhat analogous to what is observed with regard to small-pox, measles, and some other febrile contagions. I consider it as affording strong evidence, that, by being once subjected to this contagion, protection is afforded against future attacks.

The only other remark I shall take the liberty of making, with

respect to this epidemic, is, that the name cynanche parotidœa, although employed both by Sauvages and Cullen, seems to me to be not strictly proper. For, during the present epidemic, in a particular manner, the maxillary glands were fully more affected than the parotids. But an affection of the maxillary glands is by no means to be considered as a circumstance peculiar to the present epidemic. It is mentioned in the definition of the disease, as given by Dr Cullen; and I have myself observed it, on former occasions, but never so remarkably.

The cynanche parotidœa became much less frequent in the months of May and June, than it had been in February, March, and April. I saw three instances of it in one family in the Crosscauseway, about the middle of July: But I have not since that time met with any case of it; nor have I heard from any practitioner in Edinburgh, of a single case of it falling under his observation during the months of October, November, and December.

As far as I have been able to learn, this disease, while prevailing in Edinburgh, has been by no means very frequent in Leith; and there it has chiefly appeared among those children who were attending schools in Edinburgh.

In Edinburgh, as well as in Leith, another contagious epidemic has been observed not unfrequently during the whole course of the year 1810, viz. hooping-cough, the pertussis of Dr Cullen, and other nosologists. Instances of it have occurred to different practitioners during the whole course of the year. But it has been by no means so frequent in Edinburgh, as on some former occasions; and almost all the instances which I have myself seen of it, have been slight; neither the cough being very severe, nor the disease attended with much fever, or violent inflammatory affections of the breast. As far as I have been able to learn, pertussis has been much more frequent in Leith than in Edinburgh; and there also it has been more severe. Several children have been brought from Leith to Edinburgh for change of air. But I have heard of very few cases in Edinburgh, where the severity of the symptoms has been such, as to induce practitioners to recommend change of air, or to think that measure necessary.

But of all the epidemics which have prevailed in Edinburgh during the year 1810, the most remarkable has been the scarlatina. This is now the sixth time that I have seen scarlatina prevailing as an epidemic since I entered upon practice in Edinburgh. 1st, Commenced in summer 1774; 2d, in autumn 1783; 3d, in spring 1791; 4th, in spring 1798; 5th, in winter 1804; and

6th, during the present winter 1810-11. Thus it appears that the longest interval between these epidemics has been nine years, and the shortest five. I must, however, observe, that besides prevailing as an epidemic, ever since the year 1774, I have seen sporadic instances of its occurring almost every year. During four of the epidemics, it occurred among the children of my own family; and I have uniformly observed, that those who had once been subjected to it, were never again affected with it, though freely exposed to the contagion. This I have observed, not only in my own family, but in every other family where I have attended; insomuch, that, as far as I can judge from my own experience, I have been led to conclude, that the contagion of scarlatina anginosa acting upon the human system, gives as great protection against future attacks of the same contagion as that either of variola, rubeola, or pertussis. I am indeed informed by some eminent practitioners in Edinburgh, that they have seen scarlatina anginosa twice in the same patient. But I cannot help suspecting, that they may have mistaken other eruptions for scarlatina, and I am satisfied that instances of a second attack of this disease are very rare.

In the patients labouring under the epidemic 1810, I have not observed any symptoms which did not occur in former epidemics, nor indeed any which are not mentioned by Huxham and Fothergill, to whom we are, I think, indebted for the first accurate descriptions of this disease. The scarlatina of 1810 has been much less severe and less fatal than that of 1774; but it has been more severe than the epidemic of 1791, in which most of the patients were subjected only to the fever and eruption, with very little or no affection of the throat; insomuch, that it corresponded much more with the scarlatina described by Sydenham, than with Fothergill's sore throat; both of which, however, I consider as merely different modifications of scarlatina from the same specific contagion.

The first cases I saw of the scarlatina anginosa, were in the month of October; but I am informed by some practitioners that they first observed it in August. It was, however, most prevalent in November. In the beginning of December the frequency of it was diminished; but it became again more frequent towards the end of December, and numbers were affected with it on the 1st of January 1811.

These three, pertussis, cynanche parotidæa, and scarlatina, were the principal epidemics which prevailed in Edinburgh during the year 1810. Besides these, indeed, other contagious febrile diseases were also observed. But it could hardly be said, that any of them prevailed as an epidemic, during that period. I have

been informed by many practitioners, that they have seen a good number of cases of idiopathic fever, of the continued type; and I have myself attended a considerable number both in private practice and at the Royal Infirmary. Some of these I ascribed to contagion; but I was disposed to attribute the greater part of them to other causes, particularly to unusual mental or bodily exertion, exposure to cold, and the like. Almost all the cases that I saw were under the form which the late Dr George Fordyce has accurately described by the appellation of simple fever; that is, without either the inflammatory symptoms of synocha on the one hand, or the putrescent symptoms of typhus on the other; and very few of them terminated fatally.

On the subject of the continued idiopathic fevers, which were admitted into the clinical wards of the Royal Infirmary, between the first of May and the first of August 1810, a very interesting memoir has been put into my hands by our President Dr James Home, who had the care of the clinical wards during that period. This memoir coincides entirely with what I had myself occasion to observe respecting the genus of the prevailing fever. None of them were attended with petechiæ, vibices, hæmorrhages, or other symptoms indicating a strong putrescent tendency; and few of them could be traced to contagion, most of them being attributed to other causes.

Besides idiopathic fevers, many practitioners have also seen a good many cases of varicella in Edinburgh and its environs. But it could not be said to prevail as an epidemic during any part of the year 1810. It was in general slight, and without any peculiar appearance.

Several cases of variola, from accidental contagion, or what is commonly called natural small-pox, have occurred to practitioners in Edinburgh during the year 1810. But the cases of this disease have been by no means numerous; and several of the patients have been foreign sailors, who were attacked with the disease at Leith. The deaths from variola during 1810 have been by no means so many as in former years; and, as far as I have been able to learn, only six deaths have occurred from this disease during the course of last year, among those patients who were under the care of regular practitioners in Edinburgh.

Abstract of Burials in the City and Neighbourhood of Edinburgh, 1810.

1810.	Grayfriars.			Canongate.			Calton.			West Church.			Chap. of Ease.			South Leith.			North Leith.		
	Chil.	Ad.	Tot.	Chil.	Ad.	Tot.	Chil.	Ad.	Tot.	Chil.	Ad.	Tot.	Chil.	Ad.	Tot.	Chil.	Ad.	Tot.	Chil.	Ad.	To
January, .	23	46	69	14	13	27	12	26	38	24	31	55	11	7	18	11	13	24	4	6	10
February, .	29	43	72	6	19	25	21	15	36	23	38	61	6	5	11	19	10	29	7	8	15
March, . .	19	64	83	4	19	23	25	21	46	23	38	61	13	14	27	14	16	30	6	3	9
April, . . .	23	61	84	9	26	35	24	27	51	28	37	65	11	14	25	12	24	36	1	7	8
May, . . .	24	33	57	12	29	41	25	15	40	24	33	57	11	8	19	16	9	25	7	0	7
June, . . .	15	46	61	8	19	27	18	23	41	24	16	40	11	8	19	18	8	26	9	4	13
July, . . .	19	31	50	16	10	26	14	15	29	25	20	45	7	6	13	11	11	22	7	5	12
August, . .	22	32	54	9	12	21	18	13	31	18	25	43	10	11	21	12	9	21	6	6	12
September,	18	30	48	9	16	25	26	18	44	32	24	56	6	9	15	26	11	37	4	1	5
October, .	27	38	65	15	9	24	17	16	33	26	23	49	12	8	20	24	9	33	9	3	12
November,	24	38	62	18	13	31	23	25	48	26	26	52	23	14	37	24	13	37	8	5	13
December,	24	49	73	19	19	38	23	26	49	21	21	42	19	9	28	15	18	33	8	5	13
Total -	267	491	778	138	204	343	246	240	486	294	332	636	140	113	253	202	151	352	76	53	129

IX.

Case of severe Affection of the Stomach, produced by the External Application of an Alcoholic Solution of Muriate of Mercury. Communicated to Dr DUNCAN jun. by Dr CHARLES ANDERSON, Fellow of the Royal College of Surgeons, Edinburgh.

I HAVE much pleasure in complying with your request, to send you an outline of the case of derangement of the stomach, produced by the application of muriate of mercury to the external surface of the body.

A gentleman had, for some time, been much troubled with a rheumatic affection of the right arm, for which he had used anodyne and stimulating liniments with but little benefit. As he still experienced much inconvenience from the pain, he was prevailed on, by the strong solicitations of a friend, to make trial of a nostrum of his own composition, which he had frequently used himself with much benefit; and, as a further inducement, assured him that two applications never failed to remove the pain. In compliance with the instructions given, his arm was well rubbed, for the space of some minutes, before a fire, previous to going to bed. At the time, he felt some slight heat, which was attributed to the friction and fire. In the course of the night he was attacked with violent pain of the stomach, accompanied with excessive sickness and retching, which were soon succeeded by frequent diarrhœa, attended with tenesmus, and constant desire to go to stool. These symptoms continued with so much severity, that when I was called to him about ten o'clock in the morning, he appeared in extreme danger; the vomiting was incessant; and he was much debilitated, his pulse being very quick and small. His complaints were supposed to arise from something acrid having been taken into the stomach: but, on interrogating him as to this circumstance, it did not appear that he had taken any thing that could give rise to such violent complaints. He then mentioned the embrocation which the preceding evening had been applied to his arm, the composition of which was unknown to him. On examining it, it smelt of new rum, and communicated to the tongue a peculiarly pungent and metallic taste, resembling that of a solution of muriate of mercury. By the use of large doses of opium in substance and tincture, repeated at short intervals, the vomiting and diarrhœa were

removed; but the sickness continued during the whole day, and prevented him from taking any food. His arm was greatly swollen from the shoulder to the wrist; in many places it was in a state of high inflammation; and in several parts covered with numerous and extensive vesications filled with lymph, much resembling the appearance that would have been produced by a large blister. On the second day he was much relieved from the more violent symptoms that he had experienced at first, but complained of a soreness about the fauces and mouth, which was supposed to arise from the frequent vomiting. On the following day he continued in a state of progressive amendment; but complained more of his mouth, which had a nauseous coppery taste, and of his teeth being loose. On inspecting the mouth, it was evident that he was completely salivated; his breath had a strong mercurial fetor; his gums were red and detached from the teeth, just as happens when salivation is produced in the more common manner of throwing that medicine into the constitution. The pain and swelling of the arm were in some degree abated, though still very troublesome; his stomach continued well; and he was now able to take a portion of light food. In the course of about a week he recovered from the effects of the mercury; but he had the mortification to find, that notwithstanding this severe remedy, his rheumatic affection had not been removed, although the confident expectation of this, in consequence of the assurances of his friend, was the only consolation which solaced him during his confinement. His wife, who had assiduously rubbed the arm of her husband, was fortunate enough to escape such violent effects as he experienced; but she was not altogether exempted from its influence: The skin of her hand was much corrugated, though not risen into blisters, and had the appearance as if hot water had been applied to it; and it was succeeded by desquamation of the cuticle.

Having witnessed these singular effects resulting from this application, I became anxious to know its composition; and, after some solicitations, my patient learned from his friend that it was composed of strong rum holding corrosive sublimate in solution; a salt spoonful of which had been dissolved in half a pint (about ℥ viii.) of the strongest rum he could procure. *

There can be no doubt, that in this instance the derangement of the stomach had been produced by the metallic salt which had reached that organ, by absorption through the cutaneous lymphatics, just in the same manner as mercurial ointment

* On analysis, it seemed to contain in solution about thirty grains in an ounce.

enters the constitution when used in friction as a cure for syphilis.

This case affords, in my opinion, a confirmation of what has been advanced by Dr Bostock in a preceding Number of the Ed. Journal (Vol. V. p. 14.), where he narrated the result of some experiments instituted to prove an opinion delivered by him on a trial which had excited considerable attention in that part of the country. From these, Dr B. is satisfied that a mineral poison may have been taken into the stomach; and by its influence on that organ, have produced death; although, on examination afterwards, the presence of the substance may not be ascertained by the usual tests. A case in the Number of the Journal for April 1811 establishes the same thing. In it, a young woman had taken corrosive sublimate with the intention of destroying herself; and when the matter ejected by vomiting, twelve hours after taking the poison, as well as the contents of the stomach, were examined, no traces of the poison could be discovered. In the case of my patient, no trials were made to ascertain this point; but I think it almost certain, that if they had, they would have been equally unsatisfactory. I have no doubt in my own mind, that if a larger quantity of the solution had been rubbed on the arm, or that if it had been either repeated or applied to a greater extent of surface, it would have been followed by fatal effects. The appearance, and severity of the symptoms of my patient, which could only be judged of by seeing him, lead to this inference. I consider it as affording a corroboration of the opinion already noticed by that distinguished chemist, whose researches on this subject deserve so well of the profession, and which have thrown much light on a subject formerly veiled in great obscurity.

Leith, 25th May, 1811.

MEDICAL EXTRACTS, No. VI.

Lachesis Lapponica, or a Tour in Lapland, now first published from the Original Manuscript Journal of the celebrated Linnæus. By JAMES EDWARD SMITH, M. D. F. R. S. &c. President of the Linnæan Society.

WHEN we commenced our plan of selecting from voyages and travels, and works upon general subjects, such extracts as in any way promoted the advancement of our professional

knowledge, we had no idea that Linnæus himself should contribute to the value of our periodical publication. We have often had occasion to rejoice that the manuscripts, herbarium, and library of the illustrious Swede, fell into the hands of a gentleman, who has shown himself so worthy of possessing them. Through his zeal and devotion to the study of nature, they have been kept in a state of unremitting activity, instead of being left to waste and moulder in the useless museum of a foreign potentate. We doubt even if the present Journal, notwithstanding the value attached to it, after it had been permitted to be sold and carried out of the country, would have ever been communicated to the public, if unfortunately the King of Sweden had succeeded in his design of intercepting the Linnæan collection.

"The biographers of Linnæus have often mentioned the Journal of his Lapland Tour, to which he himself has frequently adverted, in various parts of his voluminous works, under the title of *Lachesis Lapponica*. The publication of this Journal has been anxiously desired; and so valuable was the manuscript considered, that on his whole collection and library being sold, after the death of his son, it was remarked that these papers at least ought to have been retained in Sweden, as a national property; the journey which they record having been undertaken at the public expense, and the objects illustrated thereby being, necessarily, more important to the author's countrymen than to any other people. This remark, however, was not made till long after the manuscript, with all the treasures which accompanied it, had escaped, by land and by sea, the pursuit instituted by the Swedish monarch to recover them, and had reached England in safety. It became a duty for their fortunate possessor to render them useful." Pref. p. vii. viii.

In carrying this laudable design into effect, difficulties occurred in decyphering and translating the original notes, which nothing short of the zeal of Dr Smith could have overcome. But we are not only indebted to the President of the Linnæan Society for having given us this work, but also for the manner in which he has given it to us. While the three weeks ramble of every superficial traveller is now made to assume the imposing and extravagant form of imperial quarto, the scientific tour of the great Linnæus, through an almost unknown country, is presented in moderate but respectable octavo. It cannot be uninteresting to know Linnæus's preparations for such a journey; to know how much he depended upon his own energies—how little he valued adventitious assistance.

"Having been appointed by the Royal Academy of Sciences, to travel through Lapland, for the purpose of investigating the three

kingdoms of nature in that country, I prepared my wearing apparel and other necessaries for the journey as follows.

"My clothes consisted of a light coat of Westgothland linsey-woolsey cloth without folds, lined with red shalloon, having small cuffs and collar of shag; leather breeches; a round wig; a green leather cap; and a pair of half-boots. I carried a small leather bag, half an ell in length, but somewhat less in breadth, furnished on one side with hooks and eyes, so that it could be opened and shut at pleasure. This bag contained one shirt, two pair of false sleeves, two half shirts, an inkstand, pencase, microscope, and spying-glass, a gauze cap to protect me occasionally from the gnats, a comb, my journal, and a parcel of paper stitched together for drying plants, both in folio, my manuscript Ornithology, *Flora Uplandica*, and *Characteres generici*. I wore a hanger at my side, and carried a small fowling-piece, as well as an octangular stick, graduated for the purpose of measuring. My pocket-book contained a passport from the Governor of Upsal, and a recommendation from the Academy." I. p, 1, 2.

Linnæus proceeded from Upsal northwards, along the west side of the Gulf of Bothnia, till he came to Tornea, at its northern extremity; and he returned along the eastern side to Abo, from which he crossed the Gulf to Upsal. But from Umoea, Pithoea, Lulea, and Tornea, he penetrated into various districts of Lapland; upon one occasion crossing even to the coast of Norway. As must necessarily occur in a journal, the same observations are frequently repeated, but still that repetition is not altogether without its use, as they refer to different places. We shall begin our extracts with what he has said of the diseases of the people whom he visited, their modes of cure and prejudices.

When in Lycksele Lapland, he says he made some inquiries concerning the diseases of the people.

"When, as occasionally happens in the course of the summer, they cannot procure fresh water, and are necessitated to drink the warm sea water, they are infallibly tormented with griping pains, with strong spasms in the region of the stomach, and pain in the lower part of the abdomen, accompanied with bloody urine. This is a species of colic, and is called *ullem*. It generally lasts but one day, rarely two. The same thing happens if they drink before they have broke their fast in a morning." I. p. 126, 7.

"They are subject to the *ullem*, or colic, of which I have already spoken, p. 127, for which they use soot, snuff, salt, and other remedies. The pain sometimes seizes them so violently, that they crawl on the ground while it lasts, not being able to stand or lie still. They are also afflicted with the asthma, the epilepsy, and a swelling of the *uvula*. The husband of a woman who had the last-mentioned disorder, cut away a part of the swelling, but it grew as large

again in the course of a twelvemonth. The *prolapsus uteri* also sometimes occurs.

" Many persons have the pleurisy, and others rheumatic complaints in the back, which descend down the hips and legs, leaving the part first attacked. These complaints happen in summer as well as in winter." I. p. 136, 7.

" As to the diseases of these people, I was informed here, that fevers are very rare indeed, and that the small-pox is also of very unfrequent occurrence. Hence, when it does come, many old people with grey hairs fall a sacrifice to the latter disorder, which, however, is not widely communicated, any more than fever, because of the very thin population. Of intermittent fever I met with only one example, and of *calculus* another. They cure a cough by sulphur laid on the lighted fungus which serves them as tinder, or on the fire, the smoke of which inhaled into the lungs is esteemed a specific; but it is a very fallacious one. For the headach a small bit of the aforesaid fungus is laid on the place where the pain is most violent, and being set on fire, it burns slowly till the part is excoriated. This therefore is the *moxa* of the Laplanders. In case of a *prolapsus uvulæ* they cut off the protuberance with a pair of scissars. For the colic or belly-ach, they rub the nails with salt; besides which, they administer oil internally." I. p. 170, 1.

When at Lulea he observes,

" The inhabitants here are frequently afflicted with the scurvy, whence arise ulcers of the mouth and *uvula*, ulcerous sores and swelling of the feet, as well as aching pains in the legs and feet, and dropsical swellings of the latter." I. p. 239.

The diseases of the Lapland Alps he thus describes.

" I was informed that in this neighbourhood the inoculated small-pox is remarkably fatal. If the patients have but seventy or eighty pustules, they die of it as of the plague. They fly to the mountains, when infected, and die. The same is the case with the measles. It appears that both these diseases are aggravated by the violent cold, whence the patients die in so miserable a manner.

" Swelled necks (goitres) are frequent.

" Sore eyes are universal, especially in the spring, when the Laplanders remove towards the Alps. The glittering of the snow has then a pernicious effect on their eyes. Aged people are very often blind.

" Female obstructions are rare, though sometimes met with among the better sort of people; neither are the *catamenia* immoderate, nor in common so copious as with us. The Lapland women are ignorant of the *leucorrhœa*.

" Of hysterics I met with but two cases. One maid-servant, twenty-four years of age, had the complaint about once a year; another, about thirty, was attacked with it monthly during the summer.

" Epilepsy sometimes occurs. Headachs are frequent; hence the forehead is often full of scars (from the application of their *toule* or *moxa*; see Vol. I. p. 274.)

" Elderly people are often hard of hearing.

" The sleep of the Laplanders is commonly sound, and they are in the habit of sleeping or waking whenever they please.

" A swelling or falling down of the *uvula* is not uncommon, in which case they frequently cut off the part affected.

" When children are troubled with swellings in the glands about the throat, the usual remedy is to prick the part, and suck out the blood, which is considered as a speedy and effectual cure. If this method be not adopted, they suppose the blood would rise to the head, and cause cutaneous eruptions there.

" Coughs are of very rare occurrence, notwithstanding the constant practice of drinking snow and ice water, even after swallowing pure grease or fat, which perhaps may prevent its bad consequences. However this may be, the Laplanders seldom die from catching cold. Cases of *phthisis* or consumption do indeed now and then occur among them; and pleurisies are very common, especially in spring and autumn. Lumbago, or pain in the back, is most prevalent during the summer. For this, as I have already mentioned, Vol. I. p. 274, actual cautery, by means of their *toule* or *moxa*, is often applied.

" Bleeding at the nose chiefly happens among those Lapland women who are in the service of the colonists, and who, in consequence of certain obstructions, are subject also to œdematous swellings of the feet.

" I have not heard of a single instance of jaundice.

" Some elderly people are afflicted with asthma; and hoarseness now and then occur in the winter and spring.

" The stone and gout are entirely unknown amongst the Laplanders.

" Swellings of the lower extremities are uncommon, as these people are in the habit of swathing their legs, which renders them all slender and well shaped. All dropsical complaints indeed are very rare, though I did meet with one case of this kind.

" Of *tenesmus* I happened to hear of but a single instance, though the Laplanpers eat so much cheese and drink water.

" Disorders in the stomach are not uncommon, which are frequently attended with *diarrhœa*; and in some years this disease is contagious." II. p. 32-5.

Concerning the ophthalmia of the Laplanders he is more minute.

" All the Laplanders are usually blear-eyed; so that one would think the word *Lappi* (Laplanders) was derived from *lippi* (blear-eyed.) The causes of this inconvenience are various, but chiefly the following.

" 1. The sharp winds. In the early part of my journey, repeated exposure to stormy weather rendered my eyes sore, so that I became unable to open them wide, and was obliged to keep them half shut. How much more must this be the case with those who dwell on the Alps, where there is a perpetual wind!

" 2. The snow, the whiteness of which, when the sun shone upon it, was very troublesome to me. To this the Alpine Landlanders are continually exposed.

" 3. The fogs. This day I found myself very comfortable in my walk over the icy mountain, till the fog, mist, or cloud, whichever it might be called, came about me, rendering the eyes of my interpreter, as well as my own, so weak and relaxed, that we could not open them wide without an effort. Such must often be the case with the Laplanders.

" 4. Smoke. How is it possible that these people should not be blear-eyed, when they are so continually shut up in their huts, where the smoke has no outlet but by the hole in the roof, and consequently fills every body's eyes as it passes!

" 5. The severity of the cold in this country must also contribute to the same inconvenience." II. p. 5–7.

In Lulean Lapland he notices some of the remedies used in the cure of diseases.

" Their *Moxa*, as the Japanese call it, but which they term *Toule*, is made of a fine fungus found on the birch, and always chosen from the south side of the tree. Of this they apply a piece as large as a pea, upon the affected part, setting fire to it with a twig of birch, and letting it burn gradually away. This is repeated two or three times. It produces a sore that will often keep open for six months afterwards; nor must it be closed till it heals spontaneously. This remedy is used for all aches and pains; as the headach, toothach, pleurisy, pain in the stomach, lumbago, &c. It is the universal medicine of the Laplanders, and may be called their little physician.

" *Kattie* is a kind of drawing or ripening plaster made in the following manner. The fine loose scaly bark of birch is set on fire, and immediately quenched in water. It is then chewed, in the same manner as when wanted for cementing earthen-ware together, and afterwards mixed with fresh turpentine from the spruce fir; both being kneaded together by the hands, till the mass becomes a black uniform plaster. This has a very emollient quality, and is successfully applied to hard imposthumes, &c.; which it brings to maturity without pain in a short time, and promotes their discharge." I. p. 274, 275.

" An ointment for burns is made of fresh cream boiled to a thick consistence, with which the sore is anointed. It removes the pain, and admirably promotes the healing of the ulcer.

" For chilblains, the oil or fat which exudes from toasted reindeer cheese, rubbed upon the part affected, is a sovereign cure. Some persons use dog's fat for the same purpose. The latter is also used for pains in the back, being rubbed in before a fire.

"The drug called castor is one of their great remedies for every disease, and the gall of the bear is another." I. p. 276.

"The people here, who dread their children should be marked with that kind of spot called *Eldmarke*, which resembles a burn, as soon as the umbilical cord is cut, rub some of its blood upon the face, hands, and breasts of the infant, by way of prevention." I. p. 254.

"The Laplanders of Westbothnia give their young children the unripe berries of this shrub *(arbutus uva ursi)* boiled, by way of a laxative or purge. Ten or twelve are the usual quantity; but the dose varies according to the age of the patient." I. p. 250.

"Lying-in women at this place (Kimi,) are accustomed to drink brandy seasoned with pepper, partly for the sake of its intoxicating quality, by way of a narcotic, and partly to bring on the labour pains. The clergyman's wife told me an infallible method, as she said, to prevent the pains which often follow childbirth. When the woman's first child is born, and the umbilical cord divided, a spoonful of the blood is given her to swallow. This is to be practised at every succeeding labour, and I was assured that each would be rendered more easy, without any after pains." II. p. 147, 148.

But upon the whole, the Laplanders are exceedingly healthy, and Linnæus has assigned what appeared to him the reasons:

1. "The extreme purity of the air, which seemed to give me new life as I inhaled it.
2. "The use of food thoroughly dressed.
3. "Eating their food cold; for they always let their boiled meat cool before they taste it, and do not seize it with avidity as soon as it comes out of the pot. *
4. "The purity of the water.
5. "Tranquillity of mind. They have no contentions, neither are they over and above careful about their affairs, nor addicted to covetousness. Their lives are protracted to extreme old age.
6. "Their never overloading the stomach, while the rustic of other countries eats till he is ready to burst.
7. "Deficiency of spirituous liquors. Of these they rarely taste, and only in such quantities as to be rather beneficial than otherwise.
8. "Their being inured to cold from their infancy renders them hardy.
9. "Probably the quantity of flesh they eat may prolong their lives, as carnivorous animals are longlived." I. p. 334, 335.

The remarkable agility of these diminutive people is frequently noticed with envy by our wearied traveller, and he has inquired

* "Linnæus's expression is, 'they do not spring upon it with boots and spurs.'"

into its causes at great length; but for this we must refer to the work itself, Vol. I. p. 325., as we wish to extract what he has said of the diseases of their domestic animals.

"The following are the disorders or inconveniences to which the reindeer are subject.

"When the frost is so intense as to form an impenetrable crust on the surface of the snow, so that the animal cannot break it with his feet, to get at the lichen on which he feeds, he is frequently starved to death. This misfortune is as dreadful to the Laplanders as any public or national calamity elsewhere; for, when his reindeer are killed, he must himself either starve to death, beg for his livelihood, or turn thief.

"The hoofs of the reindeer are not uncommonly affected with a swelling at the edge where they are attached to the skin, at which part they consequently become ulcerated, and are seldom healed. The creature thus grows lame, and cannot keep up with the herd.

"These animals are sometimes attacked with a *vertigo*, or giddiness in the head, which causes them to run round and round continually. The people assured me, that such of them as run according to the course of the sun may be expected to get the better of the disorder; but those which turn the contrary way, being supposed incurable, are immediately killed. The recovery of the former is thought to be promoted by cutting their ears, so as to cause a great discharge of blood.

"The *Kurbma*, or ulceration caused by the gad-fly (see Vol. I. p. 280.), takes place every spring, especially in the younger fawns. Such as are brought forth in the summer season are free from this misfortune the ensuing spring, but in the following one many of them lose their lives by it. When come to their full size and strength, the consequences are less fatal; but no reindeer is entirely exempt from the attacks of this pernicious insect. *

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* "Concerning the spots or imperfections in the skins of reindeer, it is certain they originate in the perforations made by insects, probably a species of *Tábanus*, through which those insects introduce their eggs. When the young ones arrive at maturity, they come forth by the same passage, and the wound is closed by a scar. On this subject, lest any person should be misled by authority, or by the writings or reports of others, I shall quote the learned work of Linder on *Syphilis*, p 11. "Reindeer in Lapland are subject to the small-pox, which in Norland is termed Kormsiuka, as I was informed at Wicksbergensbrun by Zachary Plantin, master of arts." In this the able writer has been totally misled, by a person usually esteemed no less honest than profoundly learned. I cannot however conceive how a man, who values himself upon such a character, should willingly and deliberately propagate a falsehood. He ought, on the contrary, rather to aim at correcting it. If the reindeer should even have the small-pox every year, this supposed disease will prove on examination nothing else than the sting of the Gad-fly (*Oestrus Tarandi.*) Did any man ever advance such an absurdity! Even the Laplanders themselves call the disease *Kurbma* (which is the name of the fly that actually causes it.)" I. p. 280, 281.

"The fawns are of a reddish hue the first season, during which they cut their foreteeth. In the autumn they turn blackish, and have fodder given them. They are when young frequently afflicted with a soreness in the mouth, so as to be unable for a while to eat.

"Reindeer are subject to a disease called by the Laplanders *Pekke Kattiata*, accompanied with ulcerations of the flesh, which however often heal by a sloughing of the part affected. This is an epidemic disorder. It is believed that if any of the ulcerous part, which is cast off, be swallowed by the animal, in licking his own coat, or that of any other of the herd labouring under this malady, it proves fatal by corroding the viscera.

"The dugs of the female often become chapped or sore, so as to bleed whenever they are milked." II. p. 37—40.

"Every body at Tornea was continually talking to me of a distemper to which their horned cattle are subject, and which kills many of them in the course of the winter, but especially in the spring, when they lose from fifty to a hundred head of cattle almost every year. On walking to examine the meadow into which they were first turned out to grass, I found it a bog or marsh, where the Water Hemlock, *Cicuta aquatica*, (*C. Virosa*, *Sp. Pl.* 366. *Fl. Lapp. n.* 103. *Engl. Bot. t.* 479.), grew in abundance, and had evidently been cropped plentifully by the animals in feeding. It seemed probable, therefore, that they eat it most in the spring, when first turned into this pasture: whence it proves so much more extensively fatal than in summer, when perhaps they only pick up a plant here and there. It grows in all the moist meadows which are mown for hay; consequently the cattle take it likewise in their winter food, and therefore perish, more or less, during that time of the year. We learn from Wepfer's experiments, who gave it to various kinds of animals, what violent symptoms it occasions. See his book. Nothing appeared to me so interesting, during my visit to Tornea, as to examine into the cause and remedy of this evil, If my ideas be right, the whole might be prevented by employing a woman for a month to eradicate all the *Cicuta;* by which this town, small as it is, might save above two hundred silver dollars. I was informed that the cattle dying from this cause become so infectious, that they cannot be flayed without great danger. The persons employed in that business have their hands greatly swelled by touching the carcase, and several have lost their lives in consequence. The plant in question, therefore, agrees in qualities with the *Oenanthe*, as it does likwise in place of growth and outward appearance, especially in the *pinnæ* of its leaves. *

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* "A few further remarks on the above subject, printed in the *Flora Lapponica*, may be acceptable to the English reader.

"This disease made no regular progress, nor was it communicated by infection from one animal to another. The cows are driven altogether in the spring to feed in a meadow, near the town to the southwest, on the other side of a creek of the

river, in which I was informed the greatest mortality happened. The symptoms differ in different cases; but all the cattle, feeding indiscriminately, are seized with a swelling of the abdomen, attended with convulsions, and die with horrid bellowing, in the space of a few days. No person dares venture to flay the recent carcase, it having been found by experience that not only the hands, but even the face, in consequence of the warm steams from the body, become inflamed and gangrenous, and that death finally ensued.

"I was asked whether this disease was a kind of plague; whether the meadow in question produced any venomous spiders; or whether the yellow-coloured water was poisonous?

"That it was no plague, appeared from its not being contagious, and from the spring being its most fatal season. I saw no spiders here, except what are common throughout all Sweden; nor was the yellow sediment of the water any thing more than a common innocent ochre of iron.

"I had scarcely landed from the boat in which I was taken to this meadow, than the *Cicuta* presented itself before me, and explained the cause of all this destruction. It is most abundant in the meadow where the cattle are first seized with the distemper, especially near the shore. The slightest observation teaches us that brute animals distinguish, by natural instinct, such plants as are wholesome to them, from such as are poisonous. The cattle therefore do not eat this hemlock in summer or autumn; whence few of them perish at those seasons, and such only as devour the herb in question incautiously, or from an inordinate appetite. But when they are first turned out in the spring, partly from their eagerness for fresh herbage, partly from their long fasting and starvation, they seize with avidity whatever comes within their reach. The herbage is then but short, and insufficient to satisfy them; probably also it is in general more succulent, immersed under water, and scarcely perceptibly scented; so that they are unable to distinguish the wholesome from the pernicious kinds. I remarked every where that the radical leaves only were cropped, no others; which confirmed what I have asserted. In a neighbouring meadow I saw this same plant cut with the hay for winter food; so that it is no wonder if in that state some, even of the more cautious cattle, are destroyed by it." *Fl. Lapp. ed.* 2. 76.

PART II.

CRITICAL ANALYSIS.

I.

A Letter to Dr Jones on the Composition of the Eau Medicinale d'Husson. By JAMES MOORE, Member of the Royal College of Surgeons, Surgeon to the Second Regiment of Life Guards, and Director of the National Vaccine Establishment. 8vo. pp. 46. Johnson, London. 1811.

WE took an early opportunity of noticing the pamphlet of Dr Jones, in which a French nostrum, under the title of *Eau Medicinale*, was first announced in this country, as a specific for the paroxysm of gout. The medicine, in consequence of being adapted to a *gentlemanly* disease, and administered to men of wealth and rank, soon became the subject of general conversation; and the mystery which accompanied it rendered it still more interesting. The sum of Dr Jones's knowledge of the medicine, amounted only to the result of a few cases of gout, in which it had been administered with success, during the paroxysm. For he professed a total ignorance of its composition, and stated merely that it was the discovery of a French officer, of the name of Husson; that it was *not* gratiola, nor some other vegetable substances, from which it had been supposed to be prepared; and that he believed it to be a vegetable drug hitherto, as Husson had asserted, unemployed in medicine.

The fame of the medicine, however, rapidly extended: for that *opprobrium medicorum*, the gouty paroxysm, was seen to yield in the course of a few hours, or at the most of one or two days, to this triumphant *nostrum*. Noblemen and philosophers concurred in sounding its praises, if not in dancing hornpipes in testimony of the new agility and flexibility of toe with which it had endowed them; and the President of the Royal Society, who experienced the most extraordinary deliverance from his arch-enemy, is said to have made it almost his pocket-companion. Then the chemists began to ply their analytic art, to de-

tect the nature of its ingredients; but they only discovered that it was *not* mineral. The regular practitioners, guided by the information of their olfactory and lingual organs, set about administering medicines of analogous properties, and fancied that digitalis, tobacco, digitalis lutea, and some other narcotic plants, constituted the basis of the magic water;—while the quacks did not lose so favourable an opportunity of public ignorance and curiosity, and immediately advertised the genuine *eau medicinale*, which some pretended to have prepared, after accurate analysis, and others to have imported from France; but which all knew just as well as the inventor.

In this bustle of wonder and inquiry, without any adequate success, Mr Moore has come forward with the ingenious little pamphlet which lies before us, and, we are disposed to believe, has developed the mystery.

It must be stated, that M. Husson, like the rest of the fraternity of nostrum-mongers, from whatever origin they spring, extolled his remedy as a cure for almost every malady that can afflict the human body, as well as for madness in dogs, and all distempers in cattle. Under this indiscriminate recommendation, it produced, as might be anticipated, considerable mischief; for it is obviously a medicine of active powers: and, in consequence, the sale of it was prohibited at Paris by order of the police. Its fame spread over Germany, however, and reached Warsaw, where an acute physician, Dr Wolfe, detected its peculiar virtues in the cure of gout: and the knowledge of this fact, it appears, was acquired by Dr Jones, at Montpellier, and produced the publication of his pamphlet on his return to England, where it excited the bustle just described.

Mr Moore began by examining the sensible and operative properties of the *eau medicinale*, which, by the way, is sold in bottles containing two drachms each, the half of which is commonly found sufficient for a dose.

"The first time I opened one of Husson's bottles," he says, "I was struck with its having a smell of opium; and, when I tasted it, I was confirmed in that belief. Several persons of whom I made inquiry, were also of opinion that the eau medicinale contained some flavour of opium. When to this was conjoined the fact of its frequently relieving very acute pain and promoting sleep, I was led to suspect that opium formed part of the composition of the medicine.

"The next point was to find out what other ingredients it contained; for it is evident that there is at least one, possessing qualities very different from those of opium. To detect this, I turned my thoughts to the sensible operations of the medicine on the human body; especially this, that in the small dose of two drachms, it often acts with considerable violence as an emetic and purgative, notwithstanding the opium which appears to be in the mixture. The

vegetable productions which are known to possess such active powers, are few in number; that which suggested itself most frequently to my mind, was the root of *white hellebore,*" &c.

With some ingenuity Mr Moore, reflecting that Husson was not a medical man, set about analyzing, not the man's nostrum, but *his mind*, and therefore turned to the books, which it seemed probable that such a person might refer to for information. On consulting the account of the properties of white hellebore given by Pliny, Mr Moore found that that ancient author's detail of the diseases in which that herb was beneficial, as well as of the circumstances which were deemed adverse to its use, accords, in several striking points, with the detail given by Husson; so as to render it highly probable that he took the hint of his medicine from Pliny. Among the diseases enumerated by both, are epilepsy, hydrophobia, *gout*, insanity, &c.; and the list concludes, in Pliny, with the words, "Eodem et *phthiriasis* emendatur;"* which is thus translated in that of Husson, "Elle a la même empire sur la *maladie pediculaire.*" A singular coincidence, most assuredly, and strongly corroborating the probability of Mr Moore's suggestion. But when Mr More observes upon this passage, "thus by copying Pliny, he bestows upon the eau medicinale a power of curing a disease of which there has hardly been an authenticated case, since the death of Sylla," he betrays a singular want of information upon the subject of *lousy* diseases, of which we have seen a number of instances.† Among other prohibitions against the use of hellebore, Pliny particularly mentions ulcerations of the chest, spitting of blood, or any disease in the side or fauces; and Husson acknowledges that the "eau medicinale n'est point propre aux pulmoniques."

But to proceed to the *synthetical* experiment. Mr Moore

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* Plin. Nat. Hist. Lib. XXV, Cap. 5.

† Dr Willan has the following observation upon this subject: These insects (viz. body-lice,) it is well known are bred abundantly among the inhabitants of sordid dwellings, of jails, workhouses, &c. and in such places prey upon persons of all ages indiscriminately. But in the *prurigo senilis* they arise notwithstanding every attention to cleanliness or regimen, and multiply so rapidly, that the patient endures extreme distress from their perpetual irritation," &c. "Many marvellous stories are related by Forestus, Schenckius, and others, respecting lice bred under the skin, and discharged in swarms from abscesses, strumous ulcers, and vesications. The mode in which pediculi are generated being now so well ascertained, no credit can be given to these accounts: It is probable, however, the authors of them had mistaken for lice some other species of insects, which are not unfrequently found in putrefactive sores. In the same manner may be explained the accounts given by Aristotle, Pliny, Cælius, and Josephus, of the deaths of Pherecydes, Alcmæon, Ennius, Antiochus, and Herod." On Cutaneous Diseases, P. I. p. 90.

mates his belief that flesh-eating is "the devil," (p. 142); and his object in this publication seems to be, "to lay before the public what shall constitute a strong presumption that all diseases, including deformity, are artificial, as much so as any production can be artificial; that the existence of poverty is our choice, not our necessity; and finally, that this heated and furious condition of things which we see around us, this infinite scene of toil and contest without any competent purpose, is produced by the *dire effects* on the human frame *of animal food!*" (p. 2), not, however, alone, but "co-operating with *that baneful habit, the use of water*, or of something more pernicious, to allay the thirst which that food occasions." For thirst was unknown in Paradise. The reader must not suppose, therefore, that the return to nature would consist in taking the hermit's fare;—

("His food the fruit, his drink the *crystal well*;"—)

Far from it: the liquid crystal of nature is rank poison, containing "the most mischievous qualities," and is only not pernicious when it has gone through the artificial process of evaporation through *a still*. "Neither the holy well, nor the spring at Malvern, nor even the golden water of the kings of Persia could serve as a substitute for that which has undergone *distillation*. Without this precaution, vegetable eaters will not be exempted from violent disorders, brought on by the use of common water, or of spirits." (p. 38.) Such is the return *to nature* which is here recommended!

But we anticipate our author's inferences, without mentioning the arguments upon which they rest. We shall, therefore, give a rapid sketch of these, for the edification of the reader, interrupting the narrative occasionally with a slight comment, and premising a request that he will observe the ingenuity with which our author bends any fable to the support of his hypothesis, and construes equivocal testimony in his own favour.

From the book of Genesis, Mr Newton turns to the fable of Prometheus, which he considers as "another allusion, of great antiquity, to man's dereliction of his natural diet." (p. 7.) Prometheus, who *represents the human race*, first taught the use of animal food (for Pliny says he first slew an ox); and the story of his stealing fire signifies only that he was the first *cook*, (p. 9.) Considering the fable in this light, and Prometheus as the first of the progenitors of Hannah Glass, we see the philosophical correctness of the tradition:

"Post ignem æthereâ domo
Subductum, *macies et nova febrium*
Terris incubuit cohors;
Semotique prius tarda necessitas
Lethi corripuit gradum." Hor.

at a small expense. We cannot too strongly reprobate the avaricious imposition, which has valued the medicine, whatever it may be, at half a guinea for two tea-spoonfuls, and lately imposed another shilling upon that, upon some ridiculous excuse of engraving new stamps. If the importer will allow a little common sense to moderate his *auri sacra fames*, he will immediately content himself with less enormous gains. We may add, that the virtue of hellebore (the black hellebore being the only variety used in this country) in alleviating arthritic pains, was not unknown to some of our writers on the materia medica. Alston quotes an observation of Quincy, who says, "In gout and rheumatism I have known it *do wonders.*" Alston, Mat. Med. Vol. I. p. 459.

II.

The Return to Nature: or, a Defence of the Vegetable Regimen; with some Account of an Experiment made during the last three or four years, in the Author's Family. By JOHN FRANK NEWTON, Esq. *Part the First.* 8vo. pp. 160. Cadell and Davies, London, 1811.

THIS, though not intended perhaps for a book of entertainment, is nevertheless a very entertaining book.—For the author, like an able advocate, has omitted no research, within the circle of human learning, that can assist in the establishment of his doctrine. History, both sacred and profane, mythology, astronomy, anatomy, chemistry, geology, philosophy, and poetry, are all laid under contribution, for the laudable purpose of recalling mankind to the paths of nature and "comparative immortality," which they have deserted ever since the days of Adam. For, bold as it may appear, this writer begins, "where it becomes us Christians to carry our first attention," in Paradise; and had the "elegant story" of the Garden of Eden been an allegory instead of an historical narration, he assures us, he would have thought it evident that the trees of good and evil represented the two kinds of food, vegetables and animals; and that the fall of man consisted in eating flesh, whose mortal taste "brought death into the world, and all our woe:" and that hence, one of Adam's sons became a shepherd, (p. 5, 6.) He afterwards inti-

that "Admiral Gantheaume carried with him on African cargo in one of his voyages. This creature is described as the completest sailor on board his ship. When the admiral stretched into a *northern* climate, the poor pongo sickened and died," (from what?—animal food? oh! no), "from too constantly and actively doing duty on deck, and in the shrouds," (p. 19.) Poor pongo, then, like the monkeys, most probably, owed his disease and death to the ungenial climate.

But, proceeding with his analogies, the author details at length the miseries and disorders which *domestication* entails on the animal race. "Sheep," he observes, "suffer in a way to call forth the most ordinary compassion." The wild sheep in the mountains of Kamtskatka are large, and active as goats, and leap about among frightful precipices, carrying horns that weigh from twenty-five to thirty pounds each. "There is a breed of sheep in Africa which have tails weighing about forty pounds." And Mr Newton lately saw a large ram exhibited in Piccadilly, with a long mane, on which the lad in attendance "rode across the room, without any apparent inconvenience," (p. 26.) At the sight of this Mr Newton began to reflect on the cruelties of domestication, and shuddered at his own reflections. To think that such an animal should be loaded with fat, until it pants for breath, and, when it falls, may lie till the crows pick its eyes out; and that, after robbing it of its own warm clothing, "we keep it ready for the knife in a state of incipient rot, and then exclaim, what a dull, sluggish, stupid-looking animal this is!—I shudder at the thought which forces itself on my mind. Tell me, reader, is that originally noble creature man more, or is he less deteriorated than the mouflon?" (p. 27.) Then as to the horse, "it is not uncommon for a gentleman, who has three or four saddle horses in his stable, to be unable on the same day to ride any one of them:" and "we learn from veterinary writers that horses are more exposed to tetanus than the human subject; that rheumatism is frequent among them, and that they are *not even exempt from gout*. How different this from the horse in his *savage* state!" &c. &c. (p. 20.)

How consistent! how conclusive! It must be now perfectly clear, according to our author, that animal food is the origin of evil, the forbidden fruit, the source of all disease and misery, nay the very "devil," since the same diseases and physical misfortunes are produced in sheep and horses, which are *under all circumstances purely herbivorous!* We fear that this is a dilemma, from which even the sagacity of a Newton will be unable to escape. It is obvious that, from the premises above stated, our author is now bound to infer, that there is no compromise for

man,—that the mere exclusion of animal diet will not exempt him from his habitual evils,—but that he, like the sheep and the horse, will only find health, spirit, and vigour, in returning to the "*savage state*," in which he was originally a "noble creature," and his beauty (male and female) "equalled, no doubt, or surpassed that of the Apollo of Belvidere and the Venus de Medicis." (p. 26.)

Perhaps, however, it will be affirmed by our author, that we give a partial statement of his views, for that he has distinctly said, that "vegetable diet, without quitting the use of *common water*, whether drunk alone, or in tea, coffee, beer, &c. will by no means insure health," (p. 37.); that "there is no truth of greater evidence than that this liquid contains the most mischievous qualities, not unknown to some of the rudest tribes," (p. 38.); and that he has quoted the opinions of a host of writers, poets, historians, and physicians, all of whom concur in ascribing pernicious effects to water. (pp. 39—62 inclusive.)

Our author has, indeed, made such assertions and quotations; but with the same lack of consistency and sound logic as in the foregoing case. For he sets out with affirming, that man only began to drink when he tasted flesh, "to allay the thirst which that food occasions;" (p. 2.)—that then "thirst, the necessary concomitant of a flesh diet, ensued," (p. 9.), and that "man naturally is not at all a drinking animal," (p. 31.) But, *sublatâ causâ, tollitur effectus*; those who quit this flesh diet, of course lose all disposition to drink, if these assertions be correct. But, that they are not correct, the author himself, according to his custom, furnishes abundant proof. For even the aforementioned herbivorous animals become thirsty, and die from the ill effects of water, either from want of a fresh pasturage, or from pasturage that is too humid and succulent. The author believes "that the horse has no occasion to drink, any more than the camel, when he has fresh pasturage;" but, on the other hand, even in Kamtskatka, where the mountain sheep are so strong and active, the common sheep die of rot in the plains, "parceque l'humidité, et l'herbe trop abundante en suc, cause une espèce de phthisie, qui les fait perir en peu de tems," according to M. D'Auteroche, (p. 25.) Then, as to the opinions so copiously quoted, several of them merely state the unpleasant or unwholesome effects of water that is *brackish*, *muddy*, *putrid*, or otherwise contaminated; which appears to constitute no argument against the use of the pure and limpid spring: whilst others (mark the consistency again!) tend to show that "among the elements, beauty owes so much to *water alone*, that, if we believe the Indians, it cannot thrive in a country that has it not in its purity.

The oracle itself attributes to the lymph of Arethusa a power of forming beauty," (p. 37.) Other quotations again ascribe to bad water the dry belly-ach and the scurvy, opinions long since exploded. The author has before stated, that the Holy Well itself has no such powers as this lymph of Arethusa.

There is one argument, of a moral or metaphysical character, which evinces the abundant resources of Mr Newton in the field of hypothesis. "At schools," he remarks, "where the point of honour is well sustained, the boys are not considered among themselves as disgraced by *robbing an orchard*. Think me not jocular, reader, when I inquire whether it may not be owing to fruit being the natural food of man, that this theft is looked upon in a very different light from that of pillaging a fishmonger's or a butcher's stall!" (p. 63, *note.*)

In short, by one road or other, the author is determined to come to the conclusion, that "there is a woful prostration of the human intellect," and a dreadful corruption of the human frame. Hence the multitude of useful truths that are contemned, and absurdities that are cherished, even in this nineteenth century; when there are persons who cannot grasp the conception of the existence of antipodes, and "not one man in five could be made to comprehend the first six propositions of Euclid," (p. 68.) Hence the many headlong passions excited by food and drink, which "stimulate the brain through the stomach;" and hence the many examples of fatal despair which have been exhibited to the world, "from no other cause than that the channels of the secretions were clogged by the daily deglutition of substances ill adapted to the human constitution," (p. 65.) But until Dr Lambe's theory of constitutional diseases be corroborated by chemical analysis of the fluids, Mr Newton admits that it cannot be explained, "how man, in quitting the nutriment on which alone nature has destined him to enjoy a state of perfect health, has debased his physical, and consequently his moral and intellectual faculties, to a degree almost inconceivable. Real men," exclaims our author, "have never been seen that we are aware of; nor has history, nor even poetry, depictured them. *It is not man we have before us, but the wreck of man,*" (p. 65.)—But the time will come, he prophesies, "when these things will be ordered otherwise," and justice will be rendered to the unconquerable energy of Dr Lambe; for "a more philosophic spirit than his, all Europe does not contain." Mr Newton deems it proper, however, to warn his readers that they must not expect, even by this return to nature, to get rid all at once of their maladies or morbid humours, which have been transmitted to them, we suppose from Adam; they must continue, he tells them,

"to suffer attacks from time to time, during two or three years, until the mischief in their frame, the *matter of death*," as he wishes to call it, "has been sensibly diminished, or *wholly elaborated from their system.*" But lest his readers should apprehend that, in such a case, they might prove immortal, he takes care to assure them that they still "would die of what nature appears to indicate that all animals should die of—old age; of old age in its strictest sense; that is, of a gradual and imperceptible weakening of the bodily faculties in consent: in a word, of something distinct from disease," (p. 69-70.)

Let not the reader despair, however, of attaining this "comparative immortality:" for Mr Newton now proceeds to show, "that this discovery of Dr Lambe's is not a mere phantom; that it is not grounded on general remarks or dubious analogies; but that it rests on the only firm basis of philosophical conclusions, *on experiment*," (p. 71.) Well, then; now to the experiment. Mr Newton knows *at least* twenty-five persons who are at this time living on *the diet;*" but how long, he does not seem to know; for all that he deigns to tell us is, that "they have not yet relinquished meat, fish, and common water, long enough to derive all the advantages that may be thence expected." Nevertheless this important result has been uniform in them all: "*No ill effects have in any instance been felt from the adoption of this regimen;*" a result which the author thus triumphantly announces in italics. He then proceeds to state the effects of this *harmless* regimen in his own family, consisting of his wife, three children, and their nurse, in addition to himself. From his title-page we inferred, that he did not exactly know whether they had been occupied in this experiment "*three* or *four*" years, (a singular want of accuracy in a philosopher, whose experiments are to be the foundation of an universal regeneration of the human race!) —but it appears that the lesser number is the true one, the trial being "now of three years standing," (p. 74.) The author himself was an habitual invalid, labouring under some chronic disease; and his health has improved under this temperate system, as other people have improved before, who did not distil their aqueous drink. But the benefits, which children derive from *the regimen*, are so astonishing, that in future he anticipates that every parent will say to himself, "why should I any longer be imprudent and *foolish* enough *to have my children sick?*"— "All hail to the resolution," he exclaims, "which that sentence implies!" (p. 74.) And well may he so exclaim; for the little ones, reared upon the produce of the soil and of the *still*, will grow at an extraordinary rate;—they will scarcely ever *fall*, and if they do, they will be "infinitely less liable *to break their limbs;*"

—their "objurgatory propensities" will subside;—they will become robust, erect, beautiful, with cheerful dispositions and clear heads; and escape many of the dangers which threaten life, (p. 75.)

There is nothing wanting to complete this picture, but the portraits of the author and his family, with Dr Lambe in the midst of them, which would doubtless afford us ocular proof of the robust limbs, and expanded chests, the countenances glowing with health and beauty, and, in short, every sign of approximation to the perfections of "the Venus de Medicis, and the Apollo of Belvidere."

After quoting a great number of learned authorities (pp. 85—113.), many of which have a very imperfect relation to the subject in hand, Mr Newton presents us with his bill of fare.

"Our breakfast is composed of dried fruits, whether raisins, figs, or plums, with toasted bread or biscuits, and weak tea, always made of distilled water, with a moderate portion of milk in it. The children, who do not seem to like the flavour of tea, use milk and water instead of it. When butter is added to the toast, it is in a very small quantity. The dinner consists of potatoes with some other vegetables, according as they happen to be in season; macaroni, a tart, or a pudding, with as few eggs in it as possible: to this is sometimes added a desert. Onions, especially those from Portugal, may be stewed with a little walnut pickle and some other vegetable ingredients, for which no cook will be at a loss, so as to constitute a sauce for all other vegetables. As to drinking, we are scarcely inclined on this cooling regimen to drink at all; but when it so happens, we take distilled water, having a still expressly for this purpose in our back-kitchen."—p. 114.

We leave this bill of fare without any comment, to those who may choose to adopt it: but we cannot refrain from animadverting on the most absurd and unphilosophical abuse of the reasoning faculties, which our author again exhibits, in recommending the necessity of *distilling* all the water we drink. The following extract from Hawkesworth's Voyages, he affirms, shows that even *spirits* are not so mischievous, at least in the same way, as *common water*. "Every individual had been sick (at Batavia) except the sail-maker, an old man between 70 and 80 years of age; and it is very remarkable that this old man, during our stay at the place, was constantly *drunk every day*." Now to a person endowed with only an ordinary share of sagacity, and whose intellects have not been sublimed and clarified by *the diet*, what inference could present itself from this statement, except that the old sail-maker was a man of great vigour of constitution, or that, by the incessant excitement, kept up by the alcohol, he was

enabled for the time to resist the influence of powerful morbid causes? Or what, but a wilful assumption against all evidence, could lead any one to suppose, that those who did not get drunk every day were poisoned by the *water* rather than by the miasmata in the air, the sun's heat, the food, or any other agent upon the living body? In the same logical way, he quotes Captain Cook, who tells us that, in the island of Rotterdam, he saw several persons with a sort of scrofulous ulceration on the face, and met one man who had lost his nose, and emitted a great stench; and, a few pages afterwards, the same navigator observes, that the water was *brackish*. Mr Newton, of course, deems this conclusive evidence, that the brackish water was the cause of these diseases; and upon this assumption, naturally infers that water, in *other places*, which is *not brackish*, ought to be *distilled*, Q. E. D.

But to be brief, we shall just notice in a cursory way some of the wonders which this regimen performs, and the discoveries which Mr Newton has made in the animal economy, in consequence of its agency. He has learned that, subsequent to the institution of the regimen, even the attacks of disease "are *peculiarly salutary*;" and that every illness, more mild than that which preceded, evolves from the frame some portion of the *matter of death*, or "that deleterious matter which would in time bring on premature death," (p. 116.) He even deigns to inform us, but with the modesty of a conjecture, what appears to him to be the particular quality of this matter; namely, "that the fluid is originally of a *viscous* nature." He does not, however, communicate to his readers the mode by which this mortal humour may be made evident to the senses, and subject to experimental scrutiny.

But our author is not to be restrained within the range of vulgar experiment; he has obtained, it should seem, a sort of *second sight*, and anticipates, with an eye piercing into futurity, the unimagined blessings which the regimen would confer on the physical constitution of men. "A few years steady perseverance in the use of fruits and *raw vegetables*, unmixed with any other liquid or substance, would bring the body into a state in which it would be *incapable of ulceration!*" (p. 127, *note*.) And, moreover, "it will so purify the blood, that we shall not only enjoy better health, but shall also be rendered less accessible to *infectious* disorders, than if we lived on the flesh of animals," (p. 129.) "Any man, descended from a long line of ancestors who had lived as Dr Lambe would have us all live, could scarcely be liable to *contagion of any kind*: his frame would be an unfit receptacle for this artificial poison!" (p. 131.) Here the delightful prospect opens to the author, "that the monster Syphilis, with

all its gorgon terrors, may yet be driven from the earth;"—that scourge of the human race, which "arose in all likelihood from an *exacerbation* of the *arsenical* state of the fluids, produced about the year fifteen hundred by the heat of the southern climates on unhealthy bodies, which were unaccustomed to the ardent sunshine of South America!" But here, by the way, our author makes another discovery by anticipation; for chemistry has not yet taught us, that sunshine is capable of converting animal fluids into mineral poisons!

But ignorance sees no difficulties, and penetrates, with more than eagle eye, the mist of obscurities and distances, which the ordinary organs of vision are incapable of piercing. Mr Newton, affording a single example of the *sutor ultra crepidam*, tells us, "that no medical writer *has ever attempted to explain* the cause of any one of the long catalogue of disorders to which we are liable. Hitherto they have been regarded as of mysterious original. *Dr Lambe has demonstrated by experiment the causes of all our complaints*; thereby effecting in medicine what was long ago accomplished as to certain phenomena in natural philosophy"!! (p. 136.) Well then, reader, attend to the *demonstration*, (for Mr Newton is about to propound the "whole secret"), and we shall crave your patience no longer. Videlicet—

"The cause of our disorders, *whatever it may be*, appears regularly to *distribute* its effects through every nerve and every fibre of the frame; and as this or that part happens to be a little more affected than the rest, and to become the channel by which the constitution throws off *something* (how explicit!) that, if not expelled, would occasion death, the ostensible *seat* of the disease is thus determined, and we accordingly give it a name. This seems to be the *whole secret* of the distinctive appellations by which we *baptize* our complaints." p. 138.

We are persuaded that this exposition is mere Lambe *travestie*, and the Doctor must needs write another book to correct the errors of his over-zealous pupil and worshipper. For it is impossible that a physician can palm on the world, as a new discovery, the very dregs of the old humoral pathology, which was, unfortunately for medicine and mankind, the universal faith of all the tribes of medical practitioners, for no less than thirteen hundred years. But although Mr Newton boldly insinuates that all medicine is a cheat (p. 120), it is obvious that, in this work, he intends no joke. For he vows, in his introduction, that he cannot consent to be reasoned or ridiculed out of his *feelings*, or to believe all this to be an illusion, which has been confirmed to him by what he calls "long-continued and reiterated observation."

Now, in our consideration of this subject, we have urged nothing in disparagement of the author's feelings; we have not

the smallest doubt that he has experienced all the advantages, which he describes, from the dereliction of a stimulating diet. For we know, from observation and experience, that extreme temperance, both in respect to solid food and to fermented and spirituous liquors, is decidedly beneficial in many chronic complaints; we believe that we are all in the habit of taking more of those things, than is perfectly wholesome; and we have often wished that we could prevail upon our patients to abstain more completely from both. We know, too, that the sensation of thirst is materially diminished or superseded by such abstinence. But we should deem it the worst of medical philosophy, if we were thence to conclude, that all mankind, under every form of health and disease, would be benefited by such rigid abstinence. There are fully as many cases on record of remedial effects, not less complete and decisive than those experienced by our author, from the *diæta aquea*, as it has been called by Cyrillus and others, when common water was employed, as well as from drinking the water of certain springs, as those of Malvern, Ilkley, &c. And in the alleviation of cancerous complaints, Mr Pearson and others have successfully resorted to an aqueous regimen, without the aid of a *still:* but farther experience has produced evidence, not less equivocal, of the occasional mischief of such a lowering system. In a word, he must be very ignorant of the history of medicine, and of the difficulty of ascertaining truth in that science, who, from five and twenty brief and imperfect trials of any remedy or regimen, concludes that the same results will generally or even frequently ensue. Let him look to the history of Peruvian bark, digitalis, electricity, factitious airs, metallic tractors, the Pulvis antilyssus of Mead, in short of every expedient and drug employed in medicine, for a confirmation of this fact. And until chemical analysis and often-repeated observation shall concur to prove the deleterious and arsenical properties of spring water, we shall take leave to rank that opinion with the notion of the *arsenic* of the circulating fluids, engendered by sunshine "about the year fifteen hundred."

We shall conclude with noticing our author's opinion respecting the state of human intellect, under the present carnivorous system. He is persuaded, with Mr Locke, that a large portion of mankind is "on the brink of insanity;" and he seems to think that in the true healthy state of nature, there would be no such condition of the intellect as we term genius. For although he is "not prepared to say, *perhaps*, with Cabanis, the French physician, that all genius is disease;" yet, he affirms, "there are many circumstances and indications which lead to a suspicion that extraordinary abilities of every sort are, in the present state

of mankind, *the result of the principle of vitality struggling against the progress of diseased action.*" (p. 146.) How far this philosophical and luminous view of the intellectual nature of man may be considered as affording a specimen of the progress, which our author has made, by dint of vegetable diet, towards the natural state, we must leave to our readers to determine. For, we must confess, it lies beyond the reach of our faculties, which are, doubtless, at present, too much entangled in the *viscosity* of the *matter of death.*

What is to be the subject of the *second* part of our author's essay, we are nowhere informed; but it is incidentally mentioned (p. 67, *note*), that the *third* and *fourth* parts will treat of Poverty and War.

III.—IV.

Appendix to a Proposal for a new manner of cutting for the Stone: containing an account of some cases operated on after that manner, in the Royal Infirmary of Edinburgh. By JOHN THOMSON, M. D. Professor of Surgery to the Royal College of Surgeons, and Regius Professor of Military Surgery in the University of Edinburgh. 8vo. pp. 74. Edinburgh, 1810.

Essay on some of the Stages of the Operation of cutting for the Stone: Illustrated with an Engraving. By CHARLES BRANDON TRYE, F. R. S. 8vo. pp. 49. London, 1811.

BOTH these pamphlets are composed by men of education and ability, who have been hospital surgeons for many years: they are entitled, therefore, to the threefold attention which practical observation, natural talent, and acquired instruction jointly deserve. Dr Thomson's proposal was fully described in the Fourth Volume of our Journal; and he has here published six cases in which he employed the instruments in the operation of lithotomy, which appeared to him preferable to those in common use. Some incorrect and exaggerated statements regarding two of these cases were circulated at Edinburgh, it seems, by Mr John Bell. Dr Thomson, influenced by a strong feeling of honour and duty, has printed these cases from the journals of the Infirmary, in order that the public should possess correct means of judging of the truth of such statements; he completely exposes the unfairness of them, and exculpates himself and the

surgical department of the Infirmary from the obloquy which was intended to be cast upon them. The history is of that detailed circumstantial kind which the importance of the subject required. It is because we have no such minute accounts of the success and failure of the operation, that so much labour in vain, so many avoidable difficulties, so much fruitless expenditure of ingenuity, is incurred by every new proposal for performing lithotomy. The experience of preceding operators has been in too great a degree lost to our use; and instead of profiting by past success or miscarriages, surgeons are often obliged, through ignorance of their precise causes, to repeat the old blunders before they can detect them.

Of the circumstances mentioned in Dr Thomson's narrative, the only two which arrest our particular notice, are the case of Robert Walker, and the form of the staff used in the operations.

Robert Walker, aged 50, was cut by Dr Thomson on the 5th of July 1808, in the usual lateral method, except that after the membraneous part of the urethra was divided, a *straight grooved* staff was pushed along the groove of the curved staff into the bladder. The curved being withdrawn, and the stone felt with the straight staff, the incision into the bladder was made with a large scalpel, conducted along the groove of the staff, with its edge turned upwards and outwards. The stone was then felt by the point of the finger introduced into the bladder, and again by the forceps, introduced along a blunt gorget; but on endeavouring to lay hold of it, it appeared to recede before the forceps, and could not afterwards be discovered with that instrument. The curved staff was twice introduced through the urethra, and the stone distinctly felt; but after repeated fruitless endeavours to discover, and lay hold of it with the forceps, the patient appearing considerably exhausted, it was deemed expedient to desist for the present from all further attempts, and to put him to bed.

No inflammatory symptoms came on: the man was tolerably easy, except when he voided urine, and he described the pain as being precisely similar to that which he experienced before the operation. On the fifth day after the operation, the stone was extracted with difficulty by introducing the forceps upon a blunt gorget in the groove of the curved staff. The stone had a rough surface, was an inch and a half long, and nearly the same in breadth. No unfavourable symptom occurred, the wound healed rapidly, and the patient was dismissed cured in a month.

A writer so well qualified as Dr Thomson is to speak on this point of practice, ought not to be heard through a commentator: we shall therefore quote his own words, premising only, that

we have seen this practice followed in two instances, in which the stone, apparently from its small size, could not be detected by the forceps, but passed through the wound the next day with a gush of urine. Other instances have come under our notice, where we think the operation "en deux temps" would have saved the life of the patient.

"In putting the patient to bed (says Dr T.) in the circumstances which have been described, I followed a rule which I have for several years delivered to the gentlemen attending my surgical lectures, viz.

"That when a stone cannot be felt, after proper incisions have been made into the bladder, and after a careful examination with the fingers, forceps, and searcher, we ought to desist from the use of instruments, to put the patient to bed, and to defer any further attempts at finding the stone, until after the abatement of the fever from the operation. This rule I was led to suggest from my observation of the injurious effects which arise from the friction of the forceps upon the inner surface of the bladder; from my knowledge of the fact that small stones, which could not be felt after the most diligent search at the period of the operation, have afterwards been passed spontaneously through the wound; and likewise from the instances that have been mentioned by practical authors, in which stones remaining in the bladder have been brought nearer to its neck, and placed by nature in a situation more favourable for extraction than when the incisions were first made. It was the consideration of circumstances similar to these, together with the difficulty which occasionally occurs in finding the stone, which probably gave rise to the proposal of the operation for the stone "*en deux temps;*" in which the incisions were to be made at one period, and the extraction of the stone not attempted till another. It fortunately happens, however, that but few cases require a mode of operating so protractive, and necessarily so dejecting to the mind of the patient."—p. 22, 3.

The comparative advantages and disadvantages of this mode of operating, are fully considered in the writings of Camper and Deschamps. What the obstacles were which prevented the detection and consequent extraction of the stone in this case, it is difficult to point out. Dr Thomson conjectures, that the stone was lodged in a lateral sac or pouch of the bladder, from which it projected more or less according to circumstances; and he quotes several cases of sacculated bladders, to satisfy the minds of those who are disposed to be sceptical as to the existence of such deviations from ordinary structure, because they never chanced to meet with them.

There seems no very good reason to give a decided preference to the instruments which Dr Thomson proposes to be used in dividing the neck of the bladder. He employed them with suc-

cess in five cases out of the six; but the operation is rendered more simple, by dispensing with the use of the straight staff; and we never observed any difficulty in carrying the point of the knife forwards along the groove of the common curved staff. The case which terminated fatally, was one that offered the most promising hopes of success: the patient, a boy four years old, died on the fourth day from an attack of bilious fever, without any symptoms of inflammation, or injury from the extraction of the stone. This is an instance of the uncertainty which pervades our best-directed efforts, even in the noble art of chirurgery; and it shows the operation of lithotomy is at all times hazardous, and of doubtful issue.—"Res est solliciti plena timoris."

Mr Trye is an advocate for the cutting-gorget, for so the instrument, *the prostatome*, which he recommends, may be called. In its favour he offers the successful result of his own practice in the course of twenty-five years, having lost only three cases out of more than forty patients; and if the instrument, not the skill of the operator, insured such success, no doubt Mr Trye would be entitled to praise for contriving the means for dividing the prostate with exactness, and for obviating the possibility of missing the passage into the bladder. He does not assert that the instruments which he uses are superior to those of other surgeons; but he recommends them because he has operated with them on more than the last thirty patients successively, without embarrassment and without loss. The dangers and difficulties of lithotomy appeared to him to arise from the liability of the staff to slip out of the bladder, just before the entrance of the gorget into the prostate gland. To guard against this accident, he employs a staff with the handle made quite straight, then the curve, forming nearly the segment of a circle, and the end nearly straight, forming a right angle with the handle. The next thing was to simplify Hawkins's gorget; and this is done by a broad double-edged scalpel, with the beak set rather to one side, not exactly in the middle, but so placed that the edge makes an incision two lines broad on the left side, and rather more than half an inch on the right side. This is called the prostatome. Mr Trye asks, "Is it probable that the division of the prostate gland will be done with equal safety and equal precision, if we reject every instrument besides the scalpel?" We answer, Yes. Some of the most skilful lithotomists of the present day use the common knife only for making all the necessary incisions into the bladder; and the different shapes of cutting instruments employed by different operators, serve to show, that manual dexterity and anatomical knowledge can govern and direct the motions of any contrivance, whilst no blunt

beak or sharp edge can compensate for the want of such skill. After all that has been written on the operation of lithotomy, Dr Thomson's republication of the original papers relative to Cheselden's method of operating contain most good sense and practical instruction in a small compass. The supposed improvements of late years have not fulfilled the benevolent purpose of the inventors. Difficulties must be encountered in performing so delicate an operation upon so variously formed a part as the pelvis, modified by age and disease. We do not agree with any authors in the sort of remedy they suggest for this very real grievance; and we think Cheselden's manner of cutting for the stone, is still the glory and pride of English surgery.

V.

The Anatomy of the Human Bones and Nerves, with a Description of the Human Lacteal Sac and Duct. By Alexander Monro, M. D. late Professor of Anatomy in the University of Edinburgh. *With additional Notes and Illustrations.* By Jeremiah Kirby, M. D. pp. 312. Edinburgh, 1810.

Osteologia, *or, an Anatomical Description of the Human Bones. Illustrated by Fourteen Accurate Engravings, designed for the Use of Students. Intended as an Accompaniment to Innes's Description of the Human Muscles. With Plates.* pp. 285. London, 1811.

These are both editions of the same work, although the latter is furnished with a title-page calculated to deceive the purchaser into a belief that it is an original work, and that, till its appearance, there was no work upon the bones similar to that of Innes on the Muscles. Such impositions we have repeatedly met with since we commenced our critical career; and we have some doubts of our having done our duty in allowing them to pass unnoticed. As examples, we may notice two or three.

The Edinburgh Medical and Physical Dictionary, by Dr Morris and Mr Kendrick, transcribed whole articles from previous compilers, without acknowledgement, unless where the said compiler wrote in the first person, when they had the candour to insert his name; thus giving him the credit of originality for a single observation, but robbing him of what was perhaps his chief me-

rit,—industry in research, and judgment in selection and arrangement. It was probably from a consciousness of the freedom with which they laid Edinburgh authors under contribution, that they chose to represent it as the birthplace of their bulky work; for so little was it a production of this city, that we know, and it is a curious fact, that no part of it was printed here except the blue covers of the weekly numbers, upon which "Mundell and Son, printers, Edinburgh," was conspicuously placed, with the view evidently of imposing the whole upon the world as a work printed in Edinburgh. As might naturally enough be expected, in the list of teachers whose doctrines they profess to give, the names of those from whose works they borrow most liberally are *forgotten* to be inserted.

Dr Thornton, in his New Family Herbal, has displayed less art, or more effrontery; for this gentleman is not even at the trouble of altering the personal pronoun, when it occurs in any of the numerous and long transcriptions which constitute the chief part of his work; and as these are not distinguished by inverted commas, the original authors are converted, by typographical legerde-main, into Robert John Thornton, M. D.; thus representing himself as making observations which never occurred to him; performing experiments he never instituted, and even writing in periodical works, communications he perhaps never read. As Dr Thornton's hodge-podge has never sold, and never will sell, it is needless to point out the grossness of its blunders; but we cannot avoid reprobating, in the strongest terms, the indelicate falsomeness of the dedication, and the mean artifice of representing himself as familiar with a person who never had any intercourse with him, with the intention, most probably, of impressing the public with a belief that he authorized the gross plagiarisms committed upon him, and even was concerned with Dr Thornton in his publication.

The Anatomia Britannica, in three volumes 12mo, which must not be confounded with a work in folio, having the same title, differs from both of these in the manœuvre by which it attempts to conceal its thefts. These at least flattered the authors, from whom they borrowed without leave; but this editor, in his advertisement, tries to blind the ignorant, by abusing and depreciating the excellent compendium of Mr Fyfe, which he was dishonest enough to reprint, with no improvement, and scarcely any alteration.

But to return from this digression, into which the inspection of the Osteologia Britannica led us, we shall, in proof of our character of it, insert the first paragraph which occurs, contrasted with the same passage in Dr Kirby's edition of Monro.

Monro.

" Ossa unguis, or lacrimalia, are so named, because their figure and magnitude are something near to those of a nail of one's finger, and because the tears pass upon them into the nose.

" Their external surface is composed of two smooth concavities and a middle ridge," &c. p. 94.

Osteologia.

" The ossa unguis, or lacrymalia. These names have been given these two bones because their figure and magnitude *is* something near that of a nail of one's finger, and because the tears pay upon them into the nose; *they are situated at the inner and fore-part of the orbit.*

" Their external part is composed of two hollow smooth surfaces and a middle ridge," &c. p. 109.

Our readers will observe the variation consists in a *grammatical* correction of Monro's language, and a short misplaced interpolated repetition; but we must confess that there is a still greater difference in the omission of Monro's notes, and of the valuable surgical observations everywhere interspersed. For example, in regard to the bones forming the subject of our quotation, the following paragraph is omitted by the manufacturer of the Osteologia, except the words in *italics.*

" *These unguiform bones compose the anterior internal parts of the orbits, lodge* a share of *the lacrymal sac and duct, and cover the ethmoid cells.*—Their situation and tender substance make a rash operator in danger of destroying a considerable share of the organ of smelling, when he is performing the operation of the fistula lacrymalis; but when these bones are hurt, they cast off without much difficulty, and consequently the wound is soon cured, unless the patient labours under a general cacoethes, or there be a predisposition in the bones to caries; in which case, a large train of bad symptoms follows, or, at best, the cure proves tedious.

" *These bones are fully formed in a new born child.*" p. 95, Monro; 110, Osteologia.

Of the Osteologia itself, it is needless to say another word; but it would be injustice both to its editor and our readers, not to quote the preface, which has at least the merit of being short, and of being truly original.

" It will afford the editor great satisfaction, if this small volume shall in the least tend to facilitate students in the fundamental branches of a profession, which is far superior to any other; and there is not the least doubt, but, with attention to such eminent lecturers as are at the hospitals in the metropolis, they will arrive at the utmost pinnacle of their profession, and be an ornament to human nature. The editor can only say, that he received the most material part of the rudiments of his profession in those hospitals, in a conspicuous situation under a most scientific surgeon there; and, although he will not boast of having made that proficiency he ought, he trusts his endeavours will always be directed, as far as lies in his power, to do his utmost for the profession, and to raise it, if possible, to a higher pinnacle of honour than it has at present obtained."

Our author having reached the very pinnacle of pinnacles, it is time that we take our leave of him.

Dr Kirby has discharged his duty as the editor of Monro's excellent work very ably. He has carefully reprinted the original, and has added a few useful notes, consisting chiefly of references to late authors; of Albinus's Synonymes of the Muscles, where these differ from those of Cowper and Douglas employed in the text; and of the synonymous terms of Dr Barclay's Nomenclature, when the old terms seemed to the editor in the least vague or ambiguous. He has also prefixed a short view, and a tabular outline of Dr Barclay's Nomenclature.

We consider the student of anatomy as under great obligations to Dr Kirby for having enabled him to procure, in a separate form, and at a cheap rate, a truly classical osteology, which ought to supersede all the clumsy fabrications of the day.

VI.

A Series of Original Experiments on the Foot of the Living Horse, exhibiting the changes produced by Shoeing, and the causes of the apparent mystery of this Art. By Bracy Clarke, Veterinary Surgeon, F. L. S. &c. In Two Parts. Part I. 4to. London, 1810.

The strength, the agility, and the tractableness of the horse, render him the most useful of animals, and, next to man himself, the most interesting object of attention, in all that respects the best means of obtaining and prolonging the period of his services. When we consider that seven millions of acres are required to supply food for the horses kept in this country, and think of the value of many of these noble animals, we are surprised that veterinary science should be held so cheap. Society suffers an incredible loss in the confidence which is in general reposed in the skill and experience of those ignorant and assuming smiths, grooms, and jockies who disgracefully monopolize the practice of the healing art in the diseases of horses. As surgery began to be improved when it was rescused from the hands of the *shavers*, so the veterinary art, in order to be cultivated with success, must be divorced from its alliance with the *shoers*. The establishment of the Veterinary College has done some good; but there is a prejudice in the country against young men edu-

cated there, and the emoluments of the practice among farmers particularly, are not sufficient to repay the expenses of education. It is much to be regretted, that surgeons resident in the country do not employ their skill in curing the diseases of horses and cattle. What is there derogatory to professional dignity in bringing a hard-earned knowledge of comparative anatomy and pathology into action? If village surgeons would apply themselves to the treatment of wounded and diseased animals, they would benefit the public and themselves: they would be as amply remunerated for attendance on stock, as they now are for their laborious attendance on the paupers, servants, and children.

The author of this dissertation now presents it as his first acknowledged essay on the affairs of his profession, after more than sixteen years of assiduous labour and research. He was induced to publish it in parts, to try its acceptance with the public, and to diminish the expense of printing; and he proposes to bring forward his other essays in the same plain and unostentatious form. We hope he will meet with the encouragement which he so well deserves; and we think that we shall be doing a service to our readers, by making them acquainted with some of the contents of this essay, and recommending the investigation of the subject to their notice.

The art of nailing iron to horses feet for their defence, is, in itself, sufficiently simple, Mr Clarke remarks; but the consequences entailed by a long continuance of this practice affect the feet; and persons finding defects in their horses' going, from causes which were not at once apparent, have acquiesced in the apprehensions of the mysterious nature of shoeing. The tenderness in the fore-feet of horses, especially in the saddle horses, has created great embarrassment, and has puzzled the best informed veterinary surgeons to explain. Lafosse, many years ago in France, after anatomically considering the structure and functions of the foot, asserted that this morbid tenderness proceeded from the elevation of the foot from the ground, and the consequent removal of the frog from pressure, which its situation seemed to demand; and to remove this difficulty, he strongly urged the use of the thin-heeled shoe. Mr Coleman, the ingenious professor of the Veterinary College, to whom the science has many obligations, maintained the same opinion, and supported it by many original remarks in his splendid work on the horse's foot. Experience, however, has shown, that this doctrine will not account for the disease; and notwithstanding the strong reasons urged in support of it, the low-heeled shoe has not been much used in France, or in this country.

Mr Clarke thinks that he has discovered a flagrant defect in the principle on which all the shoeing is at present founded; and his suspicion of the cause of lameness was awakened by observing, that the shape of the horse's foot is materially altered, by attaching iron to it, by means of nails driven somewhat diagonally through the lower portions of the hoof. He took casts in plaster of Paris, from a sound healthy foot of a young mare, permitted to run wild and unshod till her fifth year; and by repeating those casts from one period to another, whilst the foot was under the influence of the shoeing process, and comparing them with each other, he became accurately acquainted with the changes that took place, and the quantum of diminution of the foot in a given time. The figure of the foot thus obtained, is well represented in four beautiful plates; and the parts of the horse's foot are described in a new and concise manner. On comparing the condition of the foot in its natural state, with its condition a year and nine days after the first application of the shoe, the learned author thus describes the nature and extent of the changes wrought.

"The elastic parts of the heels have lost their swelling, rounded and beautiful appearance, by the sinking of the cartilages, and the loss of the elastic matter within; and the surface they now present is an ugly flat slope towards the base of the frog. The horny heels from one to the other, in the original state of the part, measured somewhat more than four inches; in the second cast scarcely three. The foot measured across its widest parts, viz. at the greatest swell of the quarters, was in the original cast nearly five inches and a half; in the second cast it was four inches and seven eighths. The actual length of the foot, we may remark, has not been much changed; which seems to confirm the circumstance, that the cause operating these effects had been lateral principally, and seems to evince its having been the effect of the nails. The frog had lost, through its being wasted and cut away by the smiths, the rounded swelling and projection we have distinguished by the name of the *cushion*; and its lower surface, though its substance was so much diminished, was lower by near one fourth of an inch, than the horny heels or wall. This appeared to arise in part from the condensation of the horn of the heels, from the constant pressure of the shoe upon them, and also from the circumstances before explained on the cause of this descent of the frog. The texture of the frog, from an agreeable yielding and elasticity, had become hard and unyielding to any impression of the fingers; and its sides, which at first were gently inclining or sloping to the commissure, had become almost perpendicular. The *cleft* at the base of the frog had become partly closed, forming a rounded ill-formed hole, and much deeper than the cleft of the natural foot. The base of the frog, which was, in the natural foot, of the

width of two inches and a half, had now become hardly so much as two inches. The bars had considerably lost their sloping direction, and had become more perpendicular, and encroaching upon the sides of the frog, and consequently more disposed to compress it. The sole appeared somewhat more arched or cupped than formerly; but the degree of thickening it had undergone, as also the elasticity it had lost, could not be accurately ascertained in the living subject. Thus we see the beautiful and useful symmetry of nature's mould, no part of which is without its use, has been changed by artificial restraint to deformity and incompetence." Pages 59—60.

In the concluding part of this dissertation hitherto published, the author begins a more particular examination of the nature of the shoe, and the manner in which it produces the effects he ascribes to its operation. The first and most obvious evil, he considers its permanent application and constant pressure against the bottom of the foot, with a force altogether indefinite. Next the nails in the sides, being immoveably blocked in the perforations of the shoe, create a solid resistance of iron in this part, not admitting the natural expansion of the hoof; and they almost, though not entirely, prevent every movement of the posterior parts and heels, by keeping the quarters fixed. What other effects, in Mr Clarke's opinion, are occasioned by the present mode of shoeing, we are not yet made acquainted with, as the dissertation terminates rather too abruptly, at the commencement of this inquiry. However, our readers will have already seen, that he attributes the contraction of the horse's feet, and all the train of terrible consequences, to the derangement of parts, produced by the iron shoe and nails. These cases are sometimes said to be caused by standing in the stable; but Mr Clarke promises to set that matter in a clear light, and to prove that the stable, however inimical to the feet it may be, is wholly incapable of producing such powerful effects. This can be shown most convincingly in two ways: first, by shoeing and turning the horse to grass, when the same effects will ensue: and secondly, by keeping a horse unshod in the stable, which our author has for years done, when no effects of this kind have taken place. The worst cases of contraction are with stage-horses, that have little standing in the stable.

We cannot go far into the discussion of this subject, because we want the second part of our author's arguments and illustrations; but let us take a slight view of the principal points of his theory, and ask, whether his inference be not too strong to be warranted by the result of experiments made upon a single case? Is that broad foot of the mare, the subject of these experiments, to be considered as the standard by which all horses feet are to

be measured? There is a considerable variety in the natural size of horses' fore-feet; and those which have large feet, are generally considered not to go so well as others. If contraction of the feet, and consequent stumbling and lameness, were invariably produced by iron shoes, every horse would probably become affected in that manner as he grows old, whereas horses are most liable to become *groggy*, as it is technically called, or to have contracted and tender fore-feet, between the age of four and five years. Another objection strikes us. We observe the contraction takes place in the upper part of the foot, not at the part where the pressure of the iron and nails is applied. And we are desirous that Mr Clarke should explain, how it happens that the fore-feet only are affected, not the hind; and sometimes only one foot before, is contracted, while the rest remain in the same unaltered state for many years. These apparent difficulties will perhaps be answered in the concluding part of this valuable work, which we shall expect with some impatient curiosity; the table of contents having raised our hopes of finding some practical method of diminishing the evils already pointed out, and likewise some learned researches respecting the veterinary art among the Greek and Roman writers.

The following quotation will show the author's talent for observation and discernment.

"The horse, we may remark, like other large animals, is slow in acquiring maturity; and, like them, is not very short lived. Some celebrated writers have considered the natural period of his life about fifty years. This was before the art of shoeing commenced, and may not be far from the truth in those times. If we were to give an opinion on this matter, we should state it as our belief, that he acquires his stature or height at about five years, but obtains his full bulk and strength about the eighth year; and this period, as in most other animals, if multiplied by four, will give somewhere about the period of his natural life; which, without any desire of unnaturally extending, would be from thirty-two to forty: and at the former age, we have seen (setting aside the state of his feet), horses capable of a great deal of service. But what we wish to remark, is, that frequent visits to the slaughter-house, a useful school, but not much frequented, have led us to observe and conclude, that six arrive there before, to one after the fourteenth year!" Page 64.

VII.

Report from the Vaccine Establishment, 1811, *folio. Ordered by the House of Commons to be printed*, 17*th May* 1811.

Papers relating to Vaccination in Dublin, folio. Ordered by the House of Commons to be printed, 14*th June* 1811.

The Cow-Pox Chronicle, or Medical Reporter, No. 4, *folio.* London. Ryan. 1*st June* 1811.

Report of the National Vaccine Establishment. 8vo. pp. 20. London, 1811.

A Serious Address to the Public on the Practice of Vaccination; in which the late failure of that Operation in the Family of Earl Grosvenor is particularly adverted to. 8vo. pp. 20. London, 1811.

So long as the vaccine contest continues, it continues to be our duty to notice it from time to time. Upon the general questions connected with it, we have already delivered our opinion very fully, and we have since had no reason to alter it. We have seen cases of failures, or of reputed failures; and we must confess ourselves to be so obstinate and so prejudiced that they have made no impression on our minds. If vaccination be a perfect prevention of small-pox in a very great majority of cases, as it must be allowed to be, rare apparent exceptions do not militate against the utility of the practice, but should only excite our efforts to detect the causes to which the anomaly is owing, whether these be peculiarity of constitution, adventitious circumstances, or error in the management; and to anticipate and obviate these as far as lies in our power. Nor do we think that the difficulty of accounting for these anomalous occurrences, or the being obliged to retract, in consequence of increased experience, any explanation formerly attempted, constitutes a fair charge of inconsistency and insincerity on the part of the vaccinists. They are satisfied in their own minds of the general truth of their own opinion, and they are equally satisfied that these deviations must admit of a sound explanation. The best which occurs to them they offer, sometimes too hastily; and whether they doubt its sufficiency at the time, or are only afterwards reluctantly compelled to acknowledge that it is untenable, still their errors, and their being unable to discover, what perhaps it is not given to man to know, affect not the general truth.

We now proceed to notice the documents before us, and the Report from the Vaccine Establishment claims the precedence. The general statements and opinions we shall pass over, as we have repeatedly published them; and extract only the following

paragraphs, as they contain important facts, which are of themselves conclusive with regard to the general question.

"They have great satisfaction in being able to state the favourable result of vaccination, in the Royal Military Asylum for the children of Soldiers; and in the Foundling Hospital. At the establishment of the *former* of these charities, in the year 1803, vaccination was introduced, by order of Government; and it continues to be practised at the present time. During the whole of this period, this institution, which contains more than eleven hundred children, has lost but *one* of them by small-pox, and that individual had not been vaccinated, in consequence of having been declared by the mother to have passed through the small-pox in infancy. In the *latter* institution, *no* death has occurred by small-pox, since the introduction of vaccination in the year 1801; from which period, every child has been vaccinated on its admission to the charity; and in no instance has the preventive power of vaccination been discredited, although many of the children have been repeatedly inoculated with the matter of small-pox, and been submitted to the influence of its contagion.

"They have also the satisfaction of being able to state, that similar success has attended the practice of vaccination at the Lying-in-Charity of Manchester, where, in the space of nine years, more than nine thousand persons have been effectually vaccinated; and that by a report received from Glasgow, it appears, that of fifteen thousand five hundred persons who have undergone vaccine inoculation in that city, during the last ten years, no individual has been known to have been subsequently affected with small-pox."

The last report from Dublin is equally satisfactory.

"The Directors of this Institution have nothing material to add to, or subtract from, their report of 1809. The addition of *four thousand* cases during the year 1810, tends only to confirm their belief in the efficacy, safety, and policy, of pursuing Vaccine Inoculation.

"Some alarming accounts of the failure of vaccination in the vicinity of Dublin, were propagated during the last year. On a careful investigation, they were found to have originated from falsehood; and ultimately tended, after numerous trials, to confirm the security afforded by vaccination.

"In the last report, three cases were recorded, in which the vaccine infection formed fairly on the arm, and appeared to go regularly through its several stages, though the patients were not constitutionally affected. During the year 1810, one failure only of this kind has occurred: there appears no good reason for supposing, that contingencies of this nature will be more frequent in vaccine, than they have been in variolous inoculation.

"The test proposed by Mr Bryce, and recommended in the report of last year, has been practised extensively by the Directors. In a large proportion of cases, it has afforded very satisfactory evidence of constitutional affection: it can hardly be necessary, therefore, to recommend to further notice, a practice calculated to obviate the principal objection to vaccine inoculation. Infection for the second inoculation, which should

be performed on the oppoſite arm, may be always conveniently obtained on the fifth or ſixth day, from the veſicle produced by the firſt inſertion of virus.

"The regiſter does not afford a ſingle inſtance of cow-pox exciting in the conſtitution any new or unheard-of complaint; nor does it appear that children who have had the cow-pock, are more ſubject than others to eruptions on the ſkin.

"The moſt ſatisfactory accounts of the progreſs of vaccination throughout the interior of Ireland, have been received from ſeveral correſpondents of the Inſtitution; and the Directors have great pleaſure in obſerving the zeal and diſintereſtedneſs of the country practitioners, who ſacrifice private intereſt to the public good, in ſtrongly recommending the practice."

"At a meeting of the Committee of the Royal College of Surgeons in Ireland, appointed to take into conſideration a letter from the Directors of the National Vaccine Eſtabliſhment, holden on Saturday the 16th February 1811, the following Reſolutions were unanimouſly agreed to.

"1*ſt*, Reſolved, That it appears to this Committee, from the reports of vaccine eſtabliſhments in this city, and of other public inſtitutions, and from the ſtatements of practitioners of the moſt extenſive experience, as well as from the practice of the Committee individually, that vaccination has increaſed in this country beyond the expectations of its moſt ſanguine ſupporters; and that no bad effects whatſoever can be juſtly attributed to it.

"2*d*, That as far as the Committee have been enabled to aſcertain, there is not in this country a regular practitioner, of either phyſic or ſurgery, who does not highly approve of, and adopt the practice of vaccination; and the public very generally acknowledge the benefits they derive therefrom.

"3*d*, That the practice of inoculation for the ſmall-pox has obviouſly decreaſed, and is now almoſt ſolely employed by reſpectable practitioners as a teſt of the prophylactic powers of the cow-pox.

"4*th*, From the foregoing ſtatement the Committee may fairly infer, and from their own experience may with confidence affirm, that the mortality from ſmall-pox has materially decreaſed through Ireland ſince vaccination was introduced.

"Confirmed by the College, on Thurſday, March 21ſt, 1811."

To overturn ſuch teſtimony, very ſtrong contradictory evidence muſt be adduced. Hypotheſis, ſuppoſition, and argument have here no weight, and wit and perſonal abuſe are altogether out of place. These, however, are the weapons with which the Cow-Pox Chronicle attempts to impede the progreſs of vaccination.

Some paragraphs have no apparent relation to cow-pox; others are falſehoods, deliberately uttered for the worſt of purpoſes, to impoſe upon the ignorant: and many are too clever for our dulneſs to comprehend. We ſhall quote a ſpecimen or two.

" *Bulletin.*—When Maſter Betty was indiſpoſed, a bulletin was neceſſary, every morning, to ſatisfy the curioſity of the public.

" The following lines were one day laid on the table, which might have been equally applied on a late occaſion.

Betty firſt wakes, then eats and ſleeps,
Next eats, then ſleeps and wakes;
We dare not add another word,
Leſt we ſhould make miſtakes.

" It has been remarked, that thoſe perſons who have eſcaped from the doctor and apothecary, in confluent ſmall-pox, but have loſt their beauty, have uſually been rewarded by a degree of underſtanding above their fellows; the late Mr Pitt is not the only inſtance we could adduce.

" *Deaths.*—Agreeable to the logical calculation of Moore's Almanack.

By natural ſmall-pox, according to the diſpenſation of Providence	14
With the aſſiſtance of Doctors and Apothecaries -	327
After vaccination - - - - - -	943
By proper inoculation - - - - -	
By bungling - - - - - -	3

" That only two or three perſons ſhould have ſucceſsfully maintained a war of ten years, againſt ſuch a force as the cow-poxers, is almoſt as extraordinary as that the diſcoverer ſhould have inoculated his own child with ſmall-pox, and kept it a ſecret ſo long. But the volunteer corps, which are collecting in the different counties, now begin to make the vaccinists tremble; and if Parliament ſhould iſſue no more pay to the conſpirators, an effectual end will be put to the rebellion againſt reaſon and common ſenſe."

" WONDERFUL DISCOVERY. Old hat rebeavered. Among the modern ſpeculations which have been ſo liberally rewarded by Parliament, this, like inoculation, has been paſſed by, becauſe a generous public have ſupported the invention, by their encouragement.

" It is confirmed by the affidavits of ſeveral perſons of diſtinction, that when an old hat has loſt its fur, by ſqueezing at the opera, by ſalt-water bathing, too hard bruſhing, or any other kind of friction; nay, if it be worn as ſmooth and poliſhed as the hands of Mr Grovernor's girls at Oxford, it may, by this wonderful diſcovery, become as well feathered as it was when brought to perfection by the maker.

" The lovers of old hat are therefore recommended to try the experiment, and to apply for farther particulars to the Broad Board, Burlington Wall, in Piccadilly."

These extracts are, we apprehend, ſufficient to give our readers an idea of the ſtyle and tenor of the Cow-pox Chronicle. We ſhall quote, however, one other paragraph of this jumble of misrepreſentation, becauſe it refers to the ſubject of the two pamphlets which remain to be noticed.

" The eldeſt ſon of a reſpectable and noble peer, who was vaccinated by Dr Jenner himſelf, now lies *dangerously* ill in Groſvenor Street, with natural ſmall-pox. We hope the faculty who attend him will report this caſe to the National Cow-pox Board, that it may be regiſtered, as a *ſingular inſtance.*"

The case here alluded to is detailed, together with another instance of failure in the son of Sir Henry Martin, in the report of the National Vaccine Establishment.

"On Sunday, May 26, 1811, the Hon. Robert Groſvenor, who was recovering from the hooping-cough, became much indiſpoſed and threw up his dinner. Fever followed; and he complained moſt particularly of excruciating pain in his back. He dwelt on this ſymptom until Thurſday, when he became delirious, and there were obſerved on his face about twenty ſpots.

"He had been vaccinated by Dr Jenner, in his infancy, about ten years ago; and the mark left on his arm indicated a perfect diſeaſe.

"On Friday morning, the eruption had not increaſed materially in point of number; but the appearance of the ſpots and the previous ſymptoms, ſuggeſted ſtrongly a ſuſpicion that the diſorder was the ſmall-pox.

"Sir H. Halford had occaſion to go to Windſor in the afternoon of Friday, and did not ſee Mr Robert Groſvenor until the Monday following (June 2d); but he learned from Sir W. Farquhar, who attended him moſt carefully during Sir Henry's abſence (and ſubſequently), that the eruption had increaſed prodigiouſly in the courſe of Friday; that on the evening of that day Mr Robert Groſvenor began to make bloody water, and that he continued to do ſo until Monday morning.

"On the tenth day of the diſeaſe, the puſtules began to dry upon the face, which was ſwollen to a conſiderable degree, but not to the extent of cloſing his eyes, and was attended by a ſalivation which laſted ſeveral days. Petechiæ had occurred in the interſtices of ſeveral of the ſpots, particularly on the limbs; and there was that particular ſmell from the whole frame which is remarkable in bad caſes of confluent ſmall-pox."—Report, p. 4.

To these cases the Board has opposed four recent cases of a second attack of small-pox, three after inoculation, and one after natural small-pox, completely establishing the truth of the subjoined observations.

"The peculiarities of certain conſtitutions with regard to eruptive fevers, form a curious ſubject of medical hiſtory. Some individuals have been more than once affected with ſcarlet fever and meaſles, others have been through life expoſed to the contagion of theſe diſeaſes without effect; many have reſiſted the inoculation and contagion of ſmall-pox for ſeveral years, and have afterwards become ſuſceptible of the diſorder; and ſome have been twice affected with ſmall-pox.

"Among ſuch infinite varieties of temperament it will not appear extraordinary, that vaccination, though ſo generally ſucceſsful, ſhould ſometimes fail of rendering the human conſtitution unſuſceptible of ſmall-pox, eſpecially ſince it has been found, that in ſeveral inſtances ſmall-pox has occurred to individuals over whom the ſmall-pox inoculation had appeared to have produced its full influence."—Report, p. 10.

But the Board goes farther, and contends, that even where vaccination fails to give perfect security against a future attack of small-pox, it leſſens the ſeverity of the ſubſequent diſeaſe, which,

hen it arrives near to the height, appears to receive a check, nd proceeds with unusual rapidity to recovery.

" The Board are of opinion, that the case of the Hon. Robert rosvenor was a case of confluent small-pox. That the attack and rogress of the disorder were attended by symptoms which almost nvariably announce a fatal termination. But they observe, that the welling of the face which is generally so excessive as to close the yes, and is considered as a favourable symptom, was slighter than sual; that on the tenth day the pustules began to dry upon the ace; and that from that time the disease passed with unusual rapility through the period, when life is generally esteemed to be in the reatest hazard."—Report, p. 8.

Most of the cases of small-pox after vaccination, collected with all the industry of the antivaccinists, prove the same thing. Indeed in very few of them does the disease proceed the length t did in Mr Grosvenor. The cases which Mr Brown of Musselburgh has denominated small-pox, produced by inoculation after vaccination, bear no similarity in point of severity or duration to inoculated small-pox. * To what could this be owing but to the influence of the previous vaccination? If it produced no other good effect than this, it would still have been an inestimable discovery—a means of disarming small-pox, whether inoculated or natural, of all its terrors. Such, however, even where it is said to fail, is cow-pox. †

The Serious Address, the writer of which insists upon the practicability and probability of exterminating small-pox by vaccination, also contains some very judicious remarks on Mr Grosvenor's case, which were first published in letters to the Editor of the Morning Post, and for which we must refer to the pamphlet itself, as we wish to quote the following comparative view of the advantages of inoculation and vaccination.

" There was a period in which any proposal for extirpating, or even mitigating this evil, would have been regarded as either the idle dream of a wrong-headed enthusiast, or the crude conceit of some presumptuous fool. In the course, however, of the last century, two means of relief for this grievous evil have been proposed and adopted.

" The first aimed only at mitigation, consisting in inoculating with the disease itself those who had not already caught it; and this hav-

* This reduces the question to a very simple dilemma. The inoculation either took effect, or it did not. If it did not, these were not instances of small-pox after cow-pox; and if it did, then the small-pox was wonderfully mitigated.

† Mr Brown's idea of vaccination affording protection from the first in various degrees, and of that protection becoming gradually exhausted, which he has again published in a long letter to the Editor of the Sun, on Mr G.'s case, is contrary to all analogy, and is unsupported by facts. The incongruity of his conclusion is so amusing, that we must quote it in his own words: " I think, Sir, it cannot admit

ing been proved, beyond all doubt, to render the disease less dangerous and severe than when communicated by casual infection, it was therefore gradually adopted, and became very general in the upper ranks of society. It never was so general, however, in the great mass of the population, as to diminish the mortality. On the contrary, it has been clearly proved by Dr Heberden, that after the introduction of inoculation, the total mortality increased; for, by an examination of the bills of mortality, it appeared, that before the year 1720 the average deaths from the small-pox was 70 in 1000: whereas towards the end of the century it was 95 in 1000; that is, nearly one-tenth of the whole mortality. This evidently arose from inoculation destroying more than it saved, by spreading it to places which would otherwise have escaped; for formerly it was not unusual for whole districts to be free from small-pox for 30 or 40 years, or more, so that many lived and died without ever catching it.

"This expedient, therefore, of inoculating the small-pox from itself, may fairly be said to have failed; for the just estimate of its value must depend on the general result of its effect on the whole species, and not on the benefit conferred on a small portion of it.

"Let us see whether the other, which aimed at nothing less than extirpation, has succeeded any better.

"The boldness and novelty of such a pretension made it, at first, be rejected by many, who would not even deign to examine its merits. That a morbid poison taken from a domestic animal should have the effect of destroying the susceptibility to small-pox, without producing any dangerous disorder itself, was considered by all the world, enlightened and unenlightened, either as an extravagant fancy, or, at least, as a proposition to be entertained with the utmost hesitation and caution. The light of evidence, however, broke in so rapidly, that the truth of this fact, so highly curious as a new discovery in the history of animal life, and infinitely interesting, as it affects the dearest interests of humanity, was fully established to the satisfaction of every one who had the means and the capacity of appreciating the evidence in its favour; for examples of the preventive virtue of the vaccine inoculation occurred in the circle of every one's friends and acquaintance, so as to leave no doubt in their minds of the fact. The merit of the gentleman who first drew this discovery from the fruitless obscurity of rural tradition, and rendered it available to mankind, was greatly enhanced by his perseverance under such discouragement.

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of a shadow of a doubt, that *the evidence is arrived at the most conclusive shape*; and it would be both prudent, honourable, and just, for Government to come forward and declare, that such is the present state of the evidence upon the Jennerian discovery, they cannot continue to give it the same unqualified protection and support, but must leave the public to make a selection for themselves; at the same time, strongly *enforcing the absolute necessity of* either *adopting* inoculation or *vaccination*." (Mr Brown surely forgets that he told us in the same letter, that it affords him the highest gratification to find that his "best efforts in preventing the further progress of vaccination, will have been highly useful to the public, and creditable to myself,") "*until the question is brought to a final determination.*"

" In the mean time, doubts were started concerning the duration and extent of this prevention; objections which could have no weight but in so far as they militated against the ultimate benefit held out to mankind, namely, the extirpation of the small-pox. We may affirm, that though the cow-pox should be found not to prove a security for life in every instance; and though it shall be found, that in one case in a hundred, nay, one in ten, it should fail in destroying susceptibility, it would nevertheless be of inestimable value to mankind, for it would still prove an instrument for annihilating, more or less gradually, the whole existing stock of variolous infection."—A Serious Address, &c. 4—8.

We cannot conclude this article more appropriately, than with the following resolutions, containing the results of eleven years practice, at the Original Vaccine Pock Institution, which have just reached us.

" 1. That it does appear in the practice of this Institution, that the small-pox has occurred subsequently to vaccination, in the most distinct manner, in the proportion of about one of 550 in 5000 patients.

" 2. That in these cases of failure, the small-pox was in none very severe, but, on the contrary, in most of them milder than usual, in even the inoculated small-pox.

" 3. That there have not occurred any alarming vaccine cases, excepting in a very small proportion, from inflamed and sore arms.

" 4. That in many hundreds subjected to the counterproof of re-inoculation with variolous matter, not one has taken the small-pox.

" 5. That many hundreds have been reinoculated with vaccine matter, without being able to reproduce the cow-pock.

" 6. That according to considerable experience of this Institution, persons are alike unsusceptible or susceptible of the small-pox and cow-pock after variolation or vaccination.

" 7. That reinoculation with vaccine is preferable to variolous matter; because it is desirable to avoid the risk of infecting others by disseminating small-pox infection; and because the vaccine is rarely attended with danger, or with severe symptoms.

" 8. That the cow-pock matter and variolous matter are distinctly different species of matter in the just sense of the term species or kind.

" 9. That there is now good evidence, that in the cases of failure the constitution had generally been rendered less susceptible of violent action from the agency of the small-pox matter.

" 10. That it does not appear that any new disorder is liable to be occasioned after vaccination, excepting probably certain eruptive complaints, which, however irritating, have in no instance produced any serious injury; and it appears that certain diseased states which come on after the cow-pock, do not supervene so frequently as after the small-pox.

" 11. That although it does appear from the London Bills of Mortality, that 420 fewer deaths per annum on an average have occurred during the twelve years of vaccination, than during the twelve preceding years, yet the conclusion that the diminished mortality has been occasioned by vaccination, is liable to error; but the probability is in favour of the new practice." p. 20—22.

PART III.

MEDICAL INTELLIGENCE.

Report of Diseases treated at the PUBLIC DISPENSARY, *(near Carey-Street), London, from May* 31*st to August* 31*st*, 1811.

Acute Diseases.

	No. of Cases.		No. of Cases.
Febris	16	Hepatitis	1
Tertiana	2	Dysenteria	18
Febris infantum remittens	9	Cholera	8
Phrenitis	2	Rheumatismus acutus	7
Epistaxis	1	Arthritis rheumatica	2
Cynanche tonsillaris	3	Variola	2
Pleuritis	1	Erysipelas	3
Peripneumonia	5	Herpes zoster	1
Catarrhus	48	Abortus	2
Pertussis	6		

Chronic Diseases.

	No. of Cases.		No. of Cases.
Vertigo	5	Marasmus	8
Cephalæa	16	Colica Pictonum	3
Dyspnœa	1	Ascarides	5
Cynanche chronica	3	Lumbrici	1
Asthma	2	Physconia	2
Catarrhus chronicus	17	Tympanites	1
Hæmoptysis	10	Hæmorrhois	4
Phthisis	21	Nephralgia	11
Dyspepsia	31	Dysuria	3
Gastrodynia	27	Hæmaturia	1
Vomitus	5	Gonorrhœa	1
Hæmatemesis	2	Hysteralgia	1
Hepatalgia	2	Prolapsus uteri	1
Diarrhœa	15	Amenorrhœa	7
Enterodynia	14	Leucorrhœa	23
Pyrosis	1	Menorrhagia	11
Icterus	1	Hysteria	3
Tabes mesenterica	1	Epilepsia	1

Chronic Diseases continued.

	No. of Cases.		No. of Cases.
Hypochondriasis	3	Lepra	2
Melancholia	1	Psoriasis	3
Asthenia	18	Porrigo capilitii	9
Tremor paralyticum	3	Sycosis menti	1
Paralysis	3	Lupus	1
Hemiplegia	6	Urticaria chronica	2
Chorea	2	Lichen	3
Rheumatismus chronicus	23	Scabies	13
Lumbago	4	Impetigo	3
Pleurodyne	3	Prurigo	4
Ascites	3	Eczema æstivum	1
Anasarca	7	Ecthyma	2
Hydrothorax	1	Purpura	4
Scrofula	3	Aphthæ	4
Strophulus	2		

The temperature during the three summer months has been variable, but on the whole moderate. In the latter part of June, and in July, there were occasionally a few days of summer heat; but the whole of the month of August has been temperate, not to say cool, with frequent showers: in the early part of this month, indeed, there were a few days unusually chill for the season, the thermometer scarcely rising above the 50th or 52d degree. Several thunder-storms, of considerable severity, occurred during the preceding months.

From the early, but unsteady heats, alternating with coolness and humidity, it might be expected that a considerable degree of indisposition would prevail among those who are most liable to be influenced by the state of the weather; and especially that the various modifications of disease, connected with derangements in the biliary and alvine secretions, would be most predominant. Accordingly, we have had occasion to prescribe for more than our average number of patients at the Dispensary, particularly during the last two months; the total, exclusive of those under the care of the surgeon, amounting to five hundred and thirty-three: and of these a considerable proportion is referable to gastric disorder, perhaps to the extent of one third; while the proportion of pulmonary complaints is greatly diminished, and was exceedingly small, until the chilliness and humidity of August set in. In addition to the direct effects of gastric derangement, viz. the cases of diarrhœa, cholera, and dysentery, the painful affections of the stomach and bowels, gastrodynia, and enterodynia, and the disturbed function of digestion,

under the heads of dyspepsia, bilious vomiting, &c. we must refer to the same source many of the cases of headach, vertigo, and continued fever, and perhaps the majority of instances of asthenia, not to mention those of jaundice, hepatalgia, hypochondriasis, &c.

The cases of vertigo were obviously sympathetic, being unaccompanied by lethargic disposition, by flushing of the face, throbbing of the vessels, or other symptoms of local fulness, occurring often at intervals, and being obviously connected with constipation, loss of appetite, loaded tongue, flatulence, or other dyspeptic symptoms, and generally yielding in a few days to absorbents, aromatics and laxatives. With the exception of a few instances of rheumatism of the scalp and muscles of the head, the cases of headach were perhaps all of gastric origin. The pain was most frequently seated in the forehead, over the orbits, or in the crown of the head, and sometimes in the occiput, of an obtuse kind, and unaccompanied by tenderness of the integuments, except occasionally at the crown, in cases of some standing. It was commonly accompanied by some of the dyspeptic symptoms, above alluded to, and yielded to the same plan of treatment. In one woman, in whom the sympathetic irritation had terminated, as may be frequently observed, in a degree of local congestion and increased vascular action, the vertigo was considerable, and was accompanied by an illusion of the sight; whence she fancied that she frequently saw people standing by her, who vanished, however, when she steadily directed her eyes towards them. She was perfectly aware that this was a mere illusion, and it gradually disappeared with the other symptoms.

Several of the cases of fever, though such as are usually termed continued, manifestly assumed somewhat of the remittent character, exhibiting a very material alleviation of the symptoms in the morning, and an exacerbation in the evening, which occasioned much restlessness in the night. In some of these, however, the head suffered no observable disturbance of function, except an inability of attention and mental exertion, while the acceleration of the pulse, the heat of the skin, the depression of the muscular powers, the total loss of appetite, continued from day to day, and confined the patient at first to a couch, and afterwards to his bed. In two instances, the fever showed a tendency to intermit about the end of the third week, a slight rigor preceding the exacerbation, for two or three periods, on the alternate days. There was no one indication, either in regard to the seat of the disease, or to any active remedy which might be resorted to with a prospect of abbreviating the febrile action, unless the alvine discharges were examined, which were always found in a very morbid condition; and it was interesting to observe the

progressive amelioration or increase of the symptoms, in an exact proportion with the changes of the *egesta*. In the House of Recovery, as well as in some other patients, I have lately had occasion to see several examples of this modification of fever, which Manningham has very well described in his treatise on the febricula. The principal method of cure, in such cases, consists in regulating the alvine discharge, not by active purgatives, after the manner of Dr Hamilton, but by a continual gentle operation, especially by means of the mercurial laxatives, aided by combination with others, and their irritation being counteracted by anodynes. The synochus biliosus, in which the bilious secretion is perhaps more augmented in quantity, than materially altered in quality, differs altogether from the fever just alluded to. The head is, in that case, affected with great pain, probably through sympathy with the great irritation in the first passages; and, as in the case of cholera, when these passages have been effectually cleared, the general fever speedily subsides. The present season seems to have produced fewer instances than usual of this variety of fever.

The congeries of symptoms, included in the term Asthenia, which has been formerly described, partakes in some measure of the nature of the *febricula*, is always connected with a condition which the nosologist would refer to *dyspepsia*, and especially with certain characteristic sensations of sinking, fluttering, imbecility, &c. in the epigastrium and *left* hypochondrium. In one case, which we lately saw, there was a most acute pain in this region, which was even increased on pressure; but it was accompanied with extreme languor, almost amounting to syncope, cold sweats, extreme sickness, &c. which excited alarm for the patient's life. But all these symptoms were speedily alleviated by medicines, (which, from their small bulk, were retained on the stomach), containing the extract of poppy, with aromatic powder, and small doses of calomel, and aided by an anodyne and saline enema, which brought away a considerable quantity of clayey and offensive feces. Etmüller wrote an essay to prove that these symptoms originate in that part of the arch of the *colon* which lies in the left hypochondrium, where, he says, the excrements often stagnate, and much wind is pent up: and this circumstance appears, in addition to the disordered state of the stomach, to afford a probable explanation of some of the local symptoms attending the complaint. This *asthenia*, which is a disease of women, seems to be more allied to the hypochondriasis of men than hysteria. The diffusible stimuli are requisite in the treatment of this disease, which does not bear purging; but a gentle stimulus upon the bowels, in the first instance, guarded against any

considerable evacuation or irritation by the poppy, conium, or hyoscyamus, aids the operation of the general stimuli, and accelerates the cure.

Bedford Row, Aug. 31st, 1811. T. B.

Extracts from a Letter from a Physician in London to DR DUNCAN.

Curious Case of Imposition.

A YOUNG lady of rather high rank, who, on the best authority, was even exemplary in the discharge of her duties in religion, to her relations in blood, to her friends, and in her moral conduct in general, was believed to be attacked from time to time with an excruciating painful disorder. The affluent, and, as far as known, every way comfortable circumstances of the supposed sufferer, and her general excelling character, precluded every supposition of imposition, or even of exaggeration. She had been ill, as I was first informed, for a long time, with accession, frequently, of complaints in which, with agonizing pain, concretions were voided with the urine. A certain number of these being discharged, relief was the consequence. These concretions had been shown to several medical practitioners, who troubled themselves much to determine, by examination and reading, to what class they should be referred, or whether they did not belong to a new head. I was consulted among others. A parcel of the pretended urinary concretions were furnished for my examination. The moment I saw them, the story of the child born, according to a number of witnesses, with a golden tooth, occurred to my mind. Of course, before proceeding to the investigation of the composition and properties of the stone-like substances, by taking for granted that they were urinary, I instituted a few obvious experiments to determine the previous question. These experiments at once authorized me to pronounce, that the substances before me were not of animal origin, but, in short, were nothing but common sand and pebble-stones. Their obvious properties were indeed sufficient to prove that they were merely siliceous matter. The improbability of their being any thing else, was apparent from the great quantities which had been collected, and asserted to have been excreted—not less than several pint measures in the course of the preceding two or three years ! ! !

On giving my opinion accordingly, I was warmly opposed by the strict honour and religious character of the fair sufferer. But this assertion, I need not say, availed nothing against the palpable decisive properties of the pretended calculi. I was afterwards informed, that several able chemical philosophers had been con-

sulted, who, as readily as I did, declared the stones to be common gravel and pebbles. It was naturally urged that the party could have no rational or private motive for deception. It is very true that no such motives were imaginable; and I can perceive no way of accounting for the conduct in this case, but on the supposition that the patient laboured under a particular affection which must be considered as belonging to insanity; although, in other instances, it must be imputed to fraudful design.

Consumption.

I do not recollect having read or heard the observation that females, in the very advanced stages, in the perfectly hopeless condition of pulmonary phthisis, have frequently a passion for fine dresses. I have often witnessed this passion, even in those who had no such passion in good health. Two elegant young women, lately under my care, astonished their friends by employing their mantua-makers to make for them splendid and expensive articles of wearing-apparel, with which they principally amused themselves, and by projects of being present at public assemblies, within a few weeks, or even days, of their dissolution. It is true, this fact is referable to the well known state of unapprehension of the least danger in many instances of this fatal disease.

Rupture of the Air-Vessels.

In the bodies of persons who have died after suffering for a long time from what are called asthmatical coughs, and chronic peripneumonic affections, it is not very rare that we find bladders of water, from the size of a small pea to that of a hazel nut, on the surface and borders of the lungs. In the lungs of horses this appearance I believe is more common than in the human animal. On collecting the air of those vesicles, I found, by the usual way of examination with nitrous gas, that it consisted of oxygen and nitrogen gas, in the same proportions as in atmospherical air; but I was surprised to find that it did not contain an atom of carbonic acid. By pressure the air passed from the bladders into other parts of the lungs, and from those parts, on pressure back again, into the bladders.

The state of the lungs in which these vesicles appear is different from that of broken-winded men and horses. In this state, the whole, or the greater part of the lungs, is extremely light; sometimes nearly three times lighter than water. The air passes, on pressure, from one part to another of the cellular membrane. Impressions remain for some time after being made with the fingers; the lungs in this case appear much enlarged; by mace-

ration, ablutions, &c. preparations have been made, which exhibit to the sight the rupture of the air cells. The specific gravity of these broken-winded lungs, was, in one instance, to water three to eight. But the other state of the lungs, in which the vesicles above-mentioned appear, is sometimes attended with inflammation, or at least condensation of some parts of the lungs; which the other state, *viz.* that of broken wind, never is, according to my observation, or information from others.

Hydatids in the Air Tubes.

I have seen innumerable hydatids, most of them burst, discharged with the urine, in a disease of the kidneys, of a peculiar and undescribed kind, as found after death, in a case in which I had the advantage of dissection by the late Mr John Hunter. On asking Mr Hunter what name should be given to the case before us, I remember he said, "I can only call it disease." A case lately occurred, which I have good reason for believing was attended with hydatids, discharged by expectoration. A woman, twenty-four years of age, was taken ill three months ago with what was called a pleurisy of the left side, for which she was bled six times, and repeatedly blistered; by which, and other means she recovered. Three weeks ago a cough came on, with expectoration of offensive matter for several days, and then a sense of suffocation took place, with great augmentation of the cough; during which, after great efforts, in which she felt as if she should be choked, there was coughed up a great quantity of white membraneous masses, many of which consisted of several layers, which being separated, were semitransparent, and found to have the texture of the coats of hydatids. This discharge was immediately followed by relief from pain of the chest, and of the dyspnœa. A cough, with mucous expectoration, continued, but gradually diminished, and perhaps at times with a few of the membraneous masses; there was no fever; in particular, the tongue had a healthy appearance. Felt weak, faint, and had not menstruated for three months. In about three weeks from the attack just described, the patient got pretty well. It may be proper to notice, that previously to the pleurisy, the patient had a slight cough, with a little shortness of breath for a year and half, but not more in cold than warm weather, and which she imputed to exposure to heat and cold, in the business of a kitchen.

Inflammation of the Trachea.

The windpipe, and its two great branches, are affected with disease, which either is originally inflammation, or at least ter-

minates in inflammation and death, without such symptoms as are commonly apprehended. This affection has sometimes begun with symptoms, which I have known practitioners consider to arise from the stomach, and on some occasions it has begun with a mere hoarseness, continuing in all cases for several weeks, and sometimes months, before decisive symptoms appeared of tracheal inflammation. It in several instances neither gave way to repeated application of leeches, nor to repeated application of blistering plasters, nor to the other usual means for subduing inflammatory affections. At length there is great difficulty in breathing; pain of the parts affected; excessive general irritation; the voice fails; efforts are made to cough up matter; the utmost prostration of strength takes place; delirium and death.

Brazil Salt.

I believe a late celebrated physician at York gave his sanction to this article. It was intended that the public should believe it was imported from the Brazils. Nearly twenty years ago, I had discovered that this secret medicine was nothing but the Rochelle salt, mixed with a small proportion of brown sugar, and in the state of a coarse powder, instead of its peculiarly beautiful crystals; but I had almost forgotten it, till the other day I happened to see several large jars full of it, to the amount of about ten guineas in cost, procured to carry abroad by a person of some rank. I was told no salt of the purgative kind was comparable to it; that nothing could cure so many disorders as this salt; and, accordingly after hearing these and many other encomiums, I had the curiosity to repeat my old experiment, of merely dissolving the salt in a due quantity of boiling water, filtrating it two or three times through paper, and then crystallizing; by which I obtained, as formerly, the decisively distinct crystals of *Rochelle salt*, or, in the new language of methodical chemistry, *soda-tartrate of potash*. These discoveries to the public are in general thankless ones. Accordingly, on this occasion, although the Rochelle salt was exhibited to the purchasers of the Brazil salt, from which it was produced, "it did not signify any thing," it was said, "for they would never believe but that it really was a particular salt, either from the Brazils, or composed originally by the celebrated York physician."

Eau Medicinale d'Husson.

The effects of this nostrum could not reasonably be imputed merely to the influence of popular assertion in producing belief; for the sleep, as well as of cessation of pain, and subsequent cathartic operation, must arise from other agents, most probably

from opium and a cathartic drug, which, together with the influence upon the mind, I have no doubt can produce all, or most, of the good effects of Husson's medicine. From collateral evidence, I think it improbable that any new drug, or one not in common use for one purpose or another, enters into the composition of the nostrum. Most likely it was brought into use from some old recipe. M. Page, in his publications of Ward's Empirical Medicines, gives what he calls the improved prescription of Dover's powder, by substituting the white hellebore for ipecacuanha, on account of the nauseating effects of this drug. I recollect administering this pretended improved recipe twenty years ago; but observing no advantage from it, I did not continue the prescription. It is possible that opium, conjoined with other drugs, may produce different effects from those produced by any of them singly. If this be the case in the present instance, there is every reason to believe the efficacious mixture was merely fortuitous, the vender being egregiously ignorant of medical science. It will be an extremely curious circumstance if the celebrated, and most ancient of all known cathartics, should be discovered to have been not the black hellebore, viz. *Melampodion*, but the white, viz. *Veratron*.

On Visitations to the Sea Coast.

Why should these visits be in such high estimation in Great Britain, and not scarcely at all in France or other parts of the continent? for the same kind of diseases prevail in each of the countries. One reason may be, the opulence of the British enabling them to gratify their inclination for novelty of society, and scenery of the country. Secondly, fashion, established by usage, may be the occasion of the remedy in question.

Letter to the Editors of the Edinburgh Medical and Surgical Journal, on the Gorget. By WILLIAM SIMMONS, Esq. Surgeon, Manchester.

IN the communication, which you last did me the honour to insert in your useful Journal, I described an operation for the stone, in which my colleague Mr Hamilton experienced some delay and embarrassment in passing the beak of the gorget into the groove of the staff, through the opening he had previously made for that purpose. Upon more mature consideration, however, I am of opinion, that the difficulty could not arise from

any alteration produced in the relative position of the adjoining parts by the patient's unsteadiness; because, I find that all the muscles concerned in lithotomy arise from some part of *the pelvis itself*, and are attached to parts which are likewise attached to *the pelvis itself;* as the urethra, rectum, &c. I now, also, lay no stress upon the patient's lying with his buttocks square, with respect to the operating table; because I consider that every operator should introduce the gorget, not according to any line of direction he may take from this or that part of the operating table, as relative to the position of the patient, which must be variable; but according to the direction of an imaginary line, drawn from the opening in the membraneous part of the urethra, which lies (as I discovered a few years ago *) exactly under the arch of the pubes, in the erect posture, to the middle or higher part of the os sacrum. This is a line which is precise and cannot vary, because the bones of the pelvis have no perceptible motion. Having premised those remarks, I shall proceed to relate an unsuccessful case of lithotomy, which occurred some months ago. The task is somewhat painful; but that candour which ought to be conspicuous in all our professional undertakings, and without which, no just estimate can be formed either of the excellence of this or that practice, or the superiority of this operation or that, imperiously points out the rectitude of giving the following history of a stone operation, in which I was foiled in the use of the gorget. It is a great mitigation of any reluctance I might feel, that the same accident, viz. the gorget's slipping out of the groove of the staff, and passing between the rectum and bladder, instead of into the latter viscus, has happened in the hands of the most dexterous operators with the gorget. But to proceed.

My patient was about three years old. After making a free incision of the external parts, I was considerably embarrassed in making my incision into the groove of the staff. The part seemed to slip under the point of the scalpel; and, although I knew that the exact situation of the bulb is under the arch of the pubes, and consequently superficial in a child, comparatively speaking, yet I was surprised, that the end of my forefinger could scarcely reach to the part where the staff presented; and where, after some delay, the knife at length fairly saluted its brother steel. The beak of the gorget was next introduced into the groove; and, after the proper adaptation of the staff, it was pushed progressively forwards with all the caution and steadiness I

* See my Observations on Lithotomy, &c.

was master of. When the gorget was advanced as far as necessary, I withdrew the staff. But no urine followed; not even the dribbling which indicates the *presence* of the gorget in the bladder, "when all the urine has been immediately before parted with." * I proceeded, however, to introduce the forceps, and used every endeavour to find the stone, by passing their points in various directions: but all in vain. Although the forceps penetrated in the direction of the bladder, to the full extent of their handles, yet I could distinctly discover no stone; and the operation having now lasted nearly an hour, I confessed myself foiled, and wished the little sufferer to be put to bed. But my colleagues proposed a further trial; and one of them suggested the introduction of the staff, as a guide to any opening which was made. This instrument was introduced with great ease into the bladder; which surprised us a little, as considerable difficulty has generally been stated to have been experienced in its introduction, when an opening has been made in the membraneous part of the urethra, in consequence of the point of the staff passing through this opening. This, however, was not the case upon the present occasion. When the staff was passed, another of my colleagues proposed to introduce his finger through the external incision; and, at some depth, he discovered the incision which had been made at the commencement of the operation, into the groove of the staff. This incision, it appeared, (owing, I should imagine, to the tender age of my patient), had been carried too far back; and instead of penetrating the membraneous part of the urethra under the arch of the pubes, and anterior to the prostate gland, it had been made into the groove of the staff, through the substance of the bladder itself, beyond the prostate gland, most probably in the situation of the vesiculæ seminales and their ducts. This situation of the incision fully accounted for the utmost stretch of any finger being necessary to reach the part. The incision, it would seem, was not made with the gorget, because it was not lateral, but more in a vertical direction, from above, directly downwards and backwards. The gorget, in short, appeared to have slipped from the end of the staff, and to have insinuated itself between the bladder and rectum. The forceps, consequently, at first, never entered the former viscus. This circumstance was made the more certain, because my colleague had no sooner passed his finger through the incision in the bladder, than he felt the stone; which was, as

* See this hint enlarged upon in my "Apology for the Gorget," vol. V. of the Edinburgh Medical and Surgical Journal.

ell as a second, easily extracted, although the latter could not e found, until the staff was passed a second time, which was fected without obstruction. My patient was immediately put bed, but died in about twenty-four hours. This speedy ter-ination of the little sufferer's existence surprised me not a little, therefore thought it proper to state to the hospital pupils, that ie cause of so sudden a dissolution was not at all clear.

I have thus given to the public a candid statement of a solitary ilure in introducing the gorget into the bladder! This occur-nce, however, has not shaken my confidence in that instrument, it merely inspires me with additional caution and delibera-on.

Manchester, May 30th, 1811.

Medical Lectures in the University of EDINBURGH.

ietetics, Materia Medica, and Pharmacy	Wednesday, Oct. 28.	8	Dr James Home
actice of Physic		9	Dr Gregory
emistry & Chemical Pharmacy		10	Dr Hope
heory of Physic		11	Dr Duncan, sen.
natomy and Surgery		1	Drs Monro
heory & Practice of Midwifery	Tues. Nov. 12. 3 o'clock.		Dr Jas. Hamilton.

Clinical Lectures, on the Cases of Patients in the Royal Infirmary, Dr Home and Dr Duncan, sen.—the first lecture, by Dr Home, Tuesday, November 12, at 4 o'clock afternoon.

Clinical Surgery by Mr Russell—the first lecture on Monday, ctober 28, at 5 P. M.

Military Surgery, by Dr Thomson, on Monday, November 18, at in the evening.

Morbid Anatomy, by Dr Monro, jun. on Wednesday, November , at 4 o'clock.

A Course of Practical Anatomy will be given, under the superin-ndance of Dr Monro, jun. and Mr Fyfe.

During the Summer Session, Lectures will be given on the llowing Branches of Education:

Botany, by Dr Rutherford.
Midwifery, by Dr Hamilton.
Clinical Lectures on Medicine, by Dr Rutherford.
——————— on Surgery, by Mr Russell.
Medical Jurisprudence, by Dr Duncan, jun.

On the 24th of June, the Senatus Academicus of the Univer-ty of Edinburgh conferred the degree of Doctor in Medicine

on the following gentlemen, after having gone through the appointed examinations, and publicly defended their respective inaugural dissertations:

Of SCOTLAND.

Henry Fisher,	*De Asphyxia.*
John Riach,	*De Arsenico.*
Samuel Bell,	*De Apoplexia Phrenitica.*
Peter Crawfurd,	*De Tetano.*
Alexander Stormonth,	*De Hydrocephalo Acuto.*
George Coventry,	*De Emeticis.*
Alexander Anderson,	*De Capitis Injuriis.*
Bayne Cheyne,	*De Hydrothorace.*

From ENGLAND.

William Prout,	*De Febribus Intermittentibus.*
Arnold Knight,	*De Podagra.*
George B. Blagdon,	*De Solidi Vivi Functionibus.*
Charles Wake,	*De Hepatitide.*

From IRELAND.

Roger Dartnell,	*De Nutritione.*
Edward Joyce,	*De Phrenitide Idiopathica.*
Jonathan M. Alcock,	*De Viribus Motum Sanguinis Afficientibus.*
Philip Going Kent,	*De Sanguinis Detractione.*
Baptist G. Frith,	*De Ictero.*

From PORTUGAL.

John Anthony Vieira,	*De Elephantiasi.*

From AMERICA.

Alexander W. Mitchell,	*De Distentionibus Nervorum Infantum.*
John Revere,	*De Insania.*

From CANADA.

Thomas Fargues,	*De Chorea.*

From the BRAZILS.

Michael C. De Castro,	*De Aquæ Frigidæ in Pyrexiis usu Externo.*

From JAMAICA.

Andrew White,	*De Capitis Vulnerati quibusdam Injuriis.*

From BARBADOES.

James Dottin Maycock,	*De Sensu et Motu.*
Samuel J. Collymore,	*De Pneumonia Notha.*

From ST VINCENTS.

John Melville,	*De Dieta.*

And, on the 12th of September, the same honour was conferred on the following gentlemen—

Of Scotland.

William Pulteney Alison,	*De Viribus naturæ medicatricibus.*
Alexander Manson,	*De Synocha, sive Febre Flava.*
Patrick Gillespie,	*De Phrenitide Idiopathica.*
John Gairdner,	*De Enteritide.*
William Graham,	*De Febre Puerperarum.*
William Macintyre,	*De Angina Pectoris.*
John Wyllie,	*De Hepatitide.*
William Brown,	*De Impulsu, quo animi motus cor pus afficiunt.*

From England.

George Gregory,	*De Phthisi Pulmonali.*
Henry Holland,	*De Morbis Islandiæ.*

From Ireland.

Bernard Johnson,	*De Ascite Abdominali.*
Edward Ferrar,	*De Hydrocephalo Acuto.*
Henry M'Kibbin,	*De Scarlatina.*
Farrell O'Reilly,	*De Dysenteria.*
Henry M'Giffert,	*De Pneumonia.*
William M'Clean,	*De Dyspepsia.*
Thomas Andrews,	*De Phthisi Pulmonali.*

St George's Hospital, *and Great George Street, Hanover Square.*—In the first week of October, will commence a Course of Lectures on the Practice of Physic, Therapeutics, and Chemistry, in the Lecture Room, No. 9, Great George Street, Hanover Square (removed from Leicester Square), at the usual morning hours, viz. the Medical Lectures at 8, and the Chemical at a quarter after 9 o'clock; by George Pearson, M. D. F. R. S. senior Physician of St George's Hospital, of the Royal College of Physicians, &c. A register is kept of Dr Pearson's Cases in St George's Hospital, and an account is given of them every Saturday morning, at a Clinical Lecture, at 9 o'clock.

Dr Clarke's and Mr Clarke's Lectures on Midwifery, and the Diseases of Women and Children.—Dr Clarke and Mr Clarke will begin the winter course of their Lectures on Friday, October 4.

The Lectures are read every day at the house of Mr Clarke, No. 10. Upper John Street, Golden Square, from a quarter past 0 o'clock in the morning, till a quarter past 11, for the convenience of students attending the hospitals.

The students will be provided with cases, when qualified to attend them.

For particulars, apply to Dr Clarke, No. 1, New Burlington Street; or to Mr Clarke, No. 10, Upper John Street, Golden Square.

Agreeable to the New Regulations of the Faculty of Physicians and Surgeons of Glasgow, respecting candidates for surgeons' diplomas, Dr R. Watt will give two courses of Lectures in the ensuing winter:—one on the Theory, and another on the Practice of Medicine. They commence on the 6th November, and continue for six months each.

Theatre of Anatomy, Great Windmill Street, London.

The following Lectures are delivered at this School during the season—

Anatomy, Physiology, Pathology, and Surgery, from two until four o'clock every afternoon; by James Wilson, F. R. S., and B. C. Brodie, F. R. S., Assistant Surgeon to St George's Hospital.

Chemistry and *Materia Medica*; by William J. Brande, F. R. S.

Practice of Physic, by John Cooke, M. D., and Philip Roget, M. D. Physician to the Northern Dispensary.

Theory and Practice of Surgery, by B. C. Brodie, F. R. S. &c.

A room for Practical Anatomy is open every day, under the direction of Mr Wilson and Mr Brodie, where an Anatomical Demonstration is given daily from one until to two o'clock.

Twelve Gratuitous Lectures on the Principal Operations of Surgery, are given to the pupils of St George's Hospital during the season, by Everard Home, Esq. F. R. S., Serjeant Surgeon to the King, and Surgeon to St George's Hospital.

The Anatomical Lectures commence on Tuesday the 1st of October, at two o'clock.

The Royal College of Surgeons in London have awarded the Jacksonian prize of 10*l.*, and an extraordinary premium of 10*l.* to Mr John Smith Soden, of Coventry, and to Mr James Gillman, of Highgate, both Members of that College, for their Dissertations on the *Bite of a Rabid Animal*, from the consideration that such two dissertations are highly meritorious productions, and are equally worthy of the Jacksonian prize.

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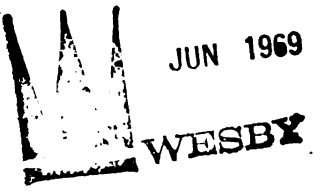
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